ZagNet User's Manual

The Definitive Guide to Gonzaga's Student Network

1999-2000 Edition

Produced by Information Technology Services
Copyright © 1997-1999 - Gonzaga University

Table of Contents

Introduction and Welcome....1
ZagNet Support Services....2
Configuring Netscape Communicator 4.6....3
Using the World-Wide Web....7
Using Usenet News....11
Using Electronic Mail (Communicator)....16
Using Electronic Mail (Pine)....21
Using Telnet....26
Downloading Files using FTP....28
Text Editors on Barney (pico, vi, emacs)....33
Student Web Pages on Barney....37
Libris - Online Library Resource....39
Computer Lab Information....42
UNIX Quick Reference....43
Purchasing a Computer....45
Internet Worksheet....47

Appendices

Appendix A – Acceptable Use Policy....A.1

Introduction and Welcome

Welcome to ZagNet, Gonzaga's student network. As a user of ZagNet, you have high-speed access to campus computing resources, the Internet, electronic mail, and the World-Wide Web. You also have a technical support team to assist you with using ZagNet should you encounter problems. ZagNet alleviates the need to use a modem to dial into the library or check your e-mail. You can now do that from the convenience of your computer without tying up your phoneline.

What Comes with ZagNet?

ZagNet is the student network and support system. It includes network access to your residence hall, software for your computer, and technical support staff should you encounter problems. It also includes academic resources such as access to the library, Encyclopedia Britannica Online, and academic software on Barney, Gonzaga's academic server. You also receive an e-mail account that you retain your entire time at Gonzaga, a server to place your personal web page on, and Usenet, a global discussion network consisting of more than 8000 discussion groups.

Where to Begin?

There are a couple of steps you should take to prepare to use ZagNet.

- Purchase and install a network card for your computer*
- Install the ZagNet software on your computer*
- Sign the Acceptable Use Policy**
- Pickup your e-mail account**

*Assistance in installation of the network card and installation of the ZagNet software is available during the first part of the semester at residence hall "connection parties" and at Connection Central in the Crosby Center. For more information on the connection parties, contact the Help Desk at x5550.

**Signing the Acceptable Use Policy and picking up your e-mail account can be done at the orientation days at the beginning of school and in AD016 during the rest of the year between 10:00AM and 11:00AM. Extended hours are available the first two weeks of each semester.

Once you have your network card and ZagNet software installed, go through this manual to configure individual programs included with ZagNet. These include Netscape Communicator 4.61, QvtNet or NCSA Telnet, and Fetch 3.0.

If You Need Assistance

If you require assistance with connecting to the network or using the included ZagNet software, contact the Help Desk at x5550 from 8:00AM to 4:30PM Monday-Friday.

ZagNet Support Services

Help Desk Information - x5550

As a part of ZagNet, Gonzaga University has a technical Help Desk. Students, faculty, and employees are able to call a single telephone number and receive help in solving computer related problems. Students who are having problems connecting to ZagNet can call the Help Desk staff, who will help them diagnose and solve basic network-related problems. If the problem can't be quickly resolved, and appears to be network-related, the Help Desk staff will initiate a work order and transmit it to desktop support staff who will work with the student to resolve the problem. In addition, the Help Desk staff track all unfinished work orders to ensure they are resolved. Students who are experiencing problems connecting their computers to ZagNet or the Internet, or using any of the supported applications, can send e-mail to helpdesk@gonzaga.edu or call x5550 to talk to a Help Desk staff member.

Supported Applications

ZagNet will provide students with access to a broad range of electronic resources. Students will be able to create their own web pages, electronically submit assignments, search the World-Wide Web for research and other materials, run academic software applications, communicate with others both on and off campus, and access scholarly research materials and electronic journals, all from the comfort and convenience of their rooms. Available resources will include student e-mail, the World-Wide Web, academic software, LIBRIS - the Foley Center online library catalog, Encyclopedia Britannica Online, the Project MUSE electronic research journal collection, and other Internet resources.

As a part of this network access, Gonzaga will provide students with limited support for computer and network software. Students who need help connecting to the ZagNet network and the Internet, or who have questions about using Netscape Communicator, QvtNet, NCSA Telnet, or Pine, should call the Help Desk at x5550 to receive help.

The university support staff will not be able to provide support for other hardware issues or software applications. For other software and hardware issues, students should call the vendor’s support line for assistance.

Further Information

This manual is intended to provide a basic introduction to ZagNet services and applications. More extensive information is available in the electronic manuals for the applications and on Barney’s web site at http://barney.gonzaga.edu.

Configuring Netscape Communicator 4.6

What is Netscape Communicator 4.6?

Netscape Communicator 4.6 is the cornerstone application of the ZagNet suite of software. It provides web browsing, e-mail, Usenet news, and web page creation capabilities. Netscape Communicator's features make it a powerful Internet tool.

The following four chapters will cover the configuration and use of Netscape Communicator. This chapter will go through the configuration, the next will discuss web browsing, the third will discuss reading Usenet news, and the final chapter will discuss reading mail with Communicator.

POP or IMAP Mail Protocol

Gonzaga's student mail server, Barney, supports two types of mail protocols, POP (aka POP3) and IMAP. The following is a brief description of each protocol. When you configure Netscape Communicator, you will need to select either POP or IMAP. This won't effect how your mail is sent or looks, it will only change where it is stored. You can always change your mind and switch the protocol you want to use later.

The primary difference between POP and IMAP is that POP downloads all your messages from the mail server to your local hard drive and then deletes them from the mail server. IMAP keeps the mail on the server and downloads only those messages you click on to read.

POP's primary advantage is that all of your messages are downloaded at once. It can also be configured to periodically check the mail server for new mail. Since it connects only periodically, any mail that has already been downloaded to your local computer can be read even if the network is down or the mail server is offline. The disadvantage of POP is that once the messages are downloaded to your local hard drive, you can't read the downloaded mail from another computer (e.g., another room or from a computer lab). This disadvantage can be diminished by turning on the "Leave messages on server" option but this means that you're keeping two copies of every message; not very economical.

IMAP is a newer protocol that was designed with the premise that the client computer (you) is always connected to the network and that the mail server is always available. It keeps all of the messages on the mail server and only downloads the header information for the mail messages (subject, sender, recipient, and length). When the user clicks on a message, IMAP downloads the rest of the message from the mail server for display but doesn't delete it from the server. IMAP also allows you to utilize mail folders on the server for filing messages. These folders are compatible with Pine so that all of your mail is available not only from Communicator, but from Pine as well. This is advantageous if you want to be able to read and file mail from other computers on campus besides your own. The disadvantage of IMAP is that it is slightly slower

than POP because it must retrieve messages from the mail server rather than from your local hard drive.

POP is recommended for those users that are going to primarily read their e-mail from one computer. It is also recommended for those users that have older computers. IMAP is recommended for those users that want full access to their e-mail regardless of the computer they are using. More information on IMAP and POP can be found at http://www.imap.org.

Configuring Netscape Communicator

The configuration for Netscape Communicator is easiest when creating a new user profile. This is done automatically when Netscape Communicator is launched for the first time. After the initial profile is created, new profiles can be created by running the "User Profile Manager" application that comes with Netscape Communicator. You can modify the settings for the active profile by selecting "Preferences…" from the Edit menu.

The information you will be entering includes your e-mail address and name, various server addresses, and other details. The settings are unique to each profile so multiple people can share the same copy of Netscape Communicator. This configuration does not include the discussion of setting up helper applications or other advanced options such as the HTML editor. Refer to the Help menu in Communicator for information of additional configuration options.

The configuration of both the Macintosh and Windows 95 versions of Netscape Communicator are nearly identical. Any differences between the two will be noted in the instructions below.

To configure Communicator, do the following:

1. Launch Netscape Communicator.

   This can be done by selecting "Netscape Navigator" from the Start menu if you are using Windows 95 or by opening the "Netscape Communicator™ folder" on your Macintosh and double-clicking on the "Netscape Communicator™" icon.

2. Begin creating a profile by clicking the "Next>" button.

   Note: If Netscape Communicator launches directly to a web browser window, at least one profile has already been created. A ZagNet technician or someone else may have already created the profile for you. Netscape Communicator might have been installed and configured prior to your arrival at Gonzaga. If you aren't sure, create a new profile by running the "User Profile Manager" that comes with Netscape Communicator.

3. Enter your name and e-mail address.

   Note: If you don't have an e-mail address yet, you can leave the e-mail address information blank and fill it in later.

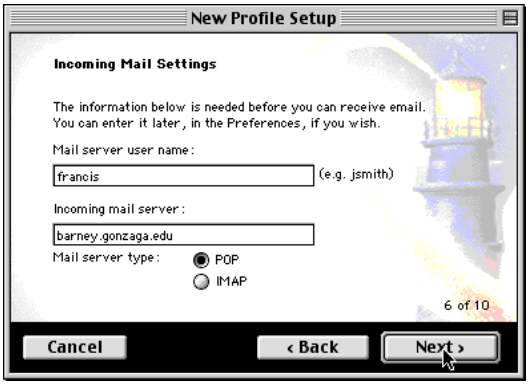
4. Enter a profile name (the default is usually fine).

5. Enter "barney.gonzaga.edu" as the outgoing SMTP server.

6. Enter your mail server username. This is your login name on Barney (e.g., francis).

7. Set the incoming mail server to "barney.gonzaga.edu" and select either "POP" or "IMAP" as your mail server type (see previous discussion).

8. Set your news server to "news.gonzaga.edu".



9. Select which shortcuts you want to appear on the Desktop and click "Next." (Mac Only)

10. If you have never used another mail program on your computer, uncheck "Import information from other programs." (Mac Only)

11. Click "Finish" (PC) or "Done" (Mac) to create your profile.

12. If you selected IMAP as your mail server type in step 7 above, do the following steps. Otherwise, skip to step 13.

    a. Select "Messenger" from the Communicator menu.

       Note: At this point, several dialog boxes will appear regarding subscribing to folders and entering your account password. Click "OK" to acknowledge the first message and then click "Cancel" to not connect to Barney at this point.

    b. Right-click on "barney.gonzaga.edu" (double-click on Mac) in the Name list (Folder Name list on Mac) and select "Mail Server Properties."

    c. Click on the "Advanced" tab.

    d. Enter "Mail/" as your IMAP Server Directory (IMAP directory path on Mac).

e. Click “OK” to save the changes.

13. To configure access to Gonzaga's e-mail directory, do the following:

a. Select “Address Book” from the Communicator menu.

b. Select “New Directory...” from the File menu.

c. Enter the following information:

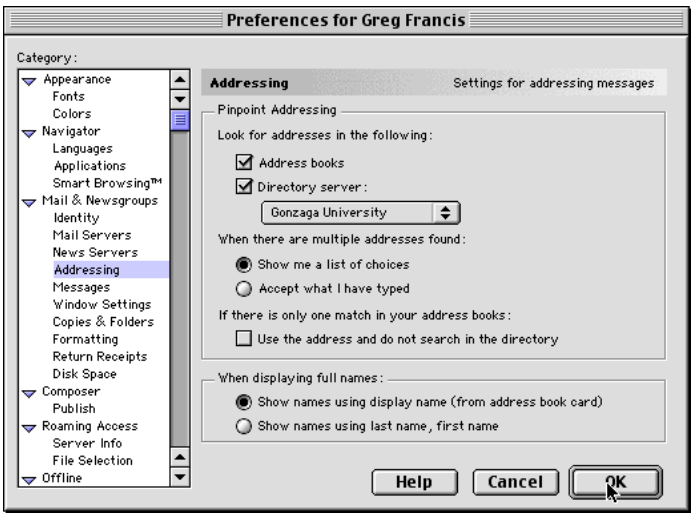
Description:	Gonzaga University
LDAP Server:	whitepages.gonzaga.edu
Search Root:	o=Gonzaga University,c=US

d. Click “OK” to add the directory.

At this point, you have configured Netscape Communicator 4.6 to read and send electronic mail, access Gonzaga’s Usenet news server, and to be able to query Gonzaga’s directory service to lookup e-mail addresses for people at Gonzaga. To learn how to use these services, go to the appropriate chapters in this manual or use Netscape Communicator’s help system.

Modifying User Settings after a Profile has been Created

The profile creator is a quick and easy way to configure the most common settings within Netscape Communicator. There may be times, however, when you want to change your user settings or modify some of the settings that weren’t set up by the profile creator. For example, you may want Netscape Communicator to automatically search the Gonzaga White Pages for the correct e-mail address of a user whenever you enter an “@gonzaga.edu” address in the To: field of a new message. This and many other features are available in the Netscape Communicator Preferences window. These options are available by selecting “Preferences…” from the Edit menu. Once you are done modifying your settings, click “OK” to close the Preferences window.



Using the World-Wide Web

What is the World-Wide Web?

The World-Wide Web (the Web) is composed of hundreds of thousands of independent web servers containing millions of web pages that are loosely linked together. These web servers are owned and operated by companies, schools, organizations, the government, and individuals. There are nearly a dozen university operated web servers at Gonzaga alone. Because of the distributed nature of the Web and the Internet, the reliability of individual web servers may vary. What may be accessible one day may be down the next. Such is the nature of the Internet.

The Web contains information on almost every topic. Since the content of the Web is often created by individuals, many diverse opinions exist on the Web. Content is often governed by a policy at the location where the web server is located. This is a the case with Gonzaga; any information that is placed on a web server at Gonzaga (whether university owned or private) is governed by Gonzaga's Acceptable Use Policy.

Using Netscape Communicator for Web Browsing

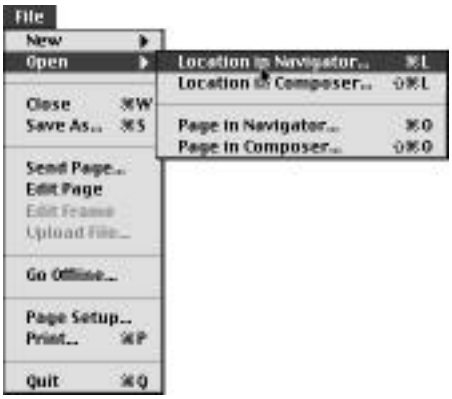
The most difficult part of using Netscape Communicator as a web browser is understanding how the World-Wide Web works. By understanding the basics of how to access documents on the Web, you are well on your way to utilizing the most common features of Communicator.

Understanding URLs

URLs (Universal Resource Locators) are the addresses of the Web. URLs are used to describe the location of web pages on the Internet. Using a URL, you can locate any web page on the Internet. The structure of a URL is fairly simple: it consists of a protocol identifier, a server address, and a web page name. For example, the URL **http://www.gonzaga.edu/zagnet/index.html** specifies the hypertext transfer protocol (http), the www.gonzaga.edu web server, and the web page named /zagnet/index.html (/zagnet/ is the path to the file) on the www.gonzaga.edu web server. There is typically a default web page on each web site that alleviates the need to specify a web page name unless you want to go to a specific page on that web server. For example, the URL **http://www.gonzaga.edu** will automatically load the default web page on the www.gonzaga.edu server.

Since a URL is the unique address to a web page, to go back to a web page in the future, the only thing you have to remember is the URL. Communicator will use the URL to locate the web page and reload all of the data for that web page. By keeping a list of URLs, you can easily return to pages you have visited before. You can also send a person a URL via e-mail and the other person can use the URL in their copy of Netscape or any other web browser and load the same page you saw.

Loading a Web Page using a URL



If you have the URL for a web page, you can easily go to that web page using Netscape. To load a web page using a URL, do the following:

1. Launch Netscape Communicator.

2. Select “Location in Communicator...” from Open sub-menu of the File menu.

3. Enter the URL to open and click “Open.”

Communicator will attempt to contact the web server where the web page described by the URL is located. If the web server is busy, unavailable or doesn’t exist, Communicator will report an error. If this happens verify that you entered the URL correctly and try again or wait and try again later.

Links

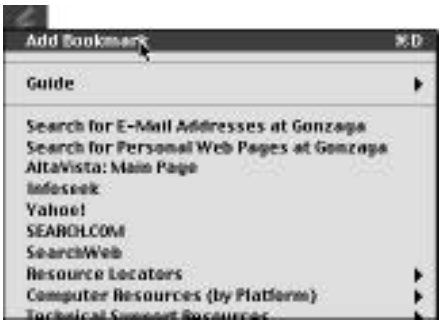
One of the most powerful features of the World-Wide Web (and the reason that it’s called a web) is the ability for one web page to link to another web page. A link is created by embedding a URL within a web page. These “links” to other pages are normally indicated on the web page as underlined colored text (typically blue). By clicking on the link, Communicator will attempt to locate the server for the link’s URL and load the new web page. This is just as if you had manually entered the URL in the Open Location dialog box.

These links are not limited to linking to other web pages. They can also refer to an e-mail address, a file to be downloaded, an audio or video clip, etc. These are all special forms of URLs that help make the World-Wide Web a rich environment. For example, the downloads web page on Barney (http://barney.gonzaga.edu/tech/download.html) is a list of links that will download files from Barney through anonymous FTP if they are clicked on.

Bookmarks

There are millions of web pages on the World-Wide Web. Among those, you will find a number of pages that you return to time and time again. Rather than write down the URL and manually enter it each time you want to go to that web page, you can create a bookmark for that page. A bookmark remembers the URL and the title of the page and stores this information in Communicator’s bookmark file. All of your bookmarks are available under the Bookmarks menu.

To add a web page to your bookmarks, do the following:



1. Go to the web page you wish to bookmark.

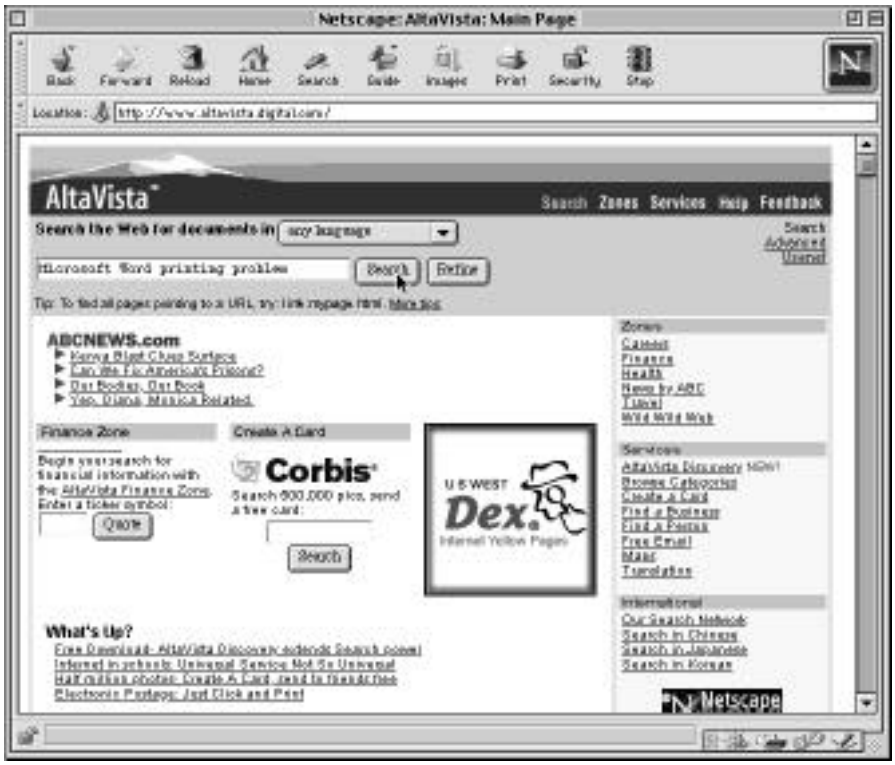
2. Select “Add Bookmark” from the Bookmarks menu.

Once you’ve added a bookmark to your Bookmarks menu, all you need to do to go to the web page you’ve bookmarked is to select the bookmark from the Bookmarks menu.

After you have accumulated a large number of bookmarks, you may find that the Bookmarks menu gets cluttered. On a PC, you can clean up the Bookmarks menu by selecting “Edit Bookmarks…” from the Bookmarks sub-menu of the Communicator menu. On a Mac, select “Bookmarks” from the menu symbolized with the Communicator icon. This will open a window that will allow you to delete old bookmarks and arrange bookmarks into groups (groups show up as sub-menus within the Bookmarks menu).

Finding Information on the World-Wide Web

As mentioned earlier, the World-Wide Web contains millions of web pages that are constantly changing. Because of this, locating information could be difficult. Fortunately, there are a number of “search engines” on the World-Wide Web that make it easy to search the Internet. These search engines are constantly searching the Web for new or changed web servers and pages. The information they find is added to their databases which are indexed for easy and fast searching.



Using any of these search engines, you can do a keyword search that will effectively search millions of web pages in just a few seconds. The search engine returns a list of links that match your search criteria. The better the search criteria you enter, the better the search results. For example, searching for “Word help” would return many thousands of hits but

searching for “Microsoft Word printing problem” makes the search more specific. Depending on the search engine there are ways to make the search even clearer.

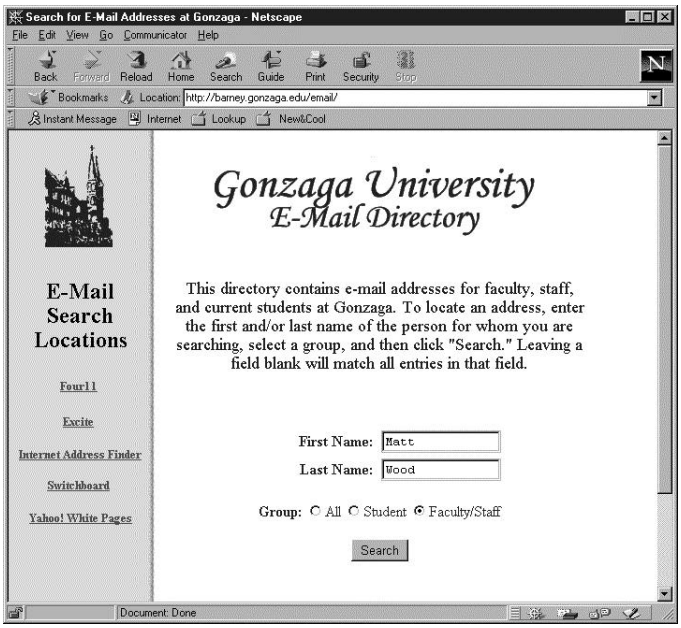
Here are some search engines you may find useful:

http://www.altavista.com
http://www.infoseek.com
http://www.yahoo.com
http://www.lycos.com

Yahoo (http://www.yahoo.com) has an extensive list of search engines on their web site. To find the list, go to Yahoo and search for “search engines.”

Finding E-Mail Addresses on the Web

While there is no master directory of e-mail addresses on the Web, many organizations maintain online e-mail directories for the their employees and for universities, their students. Gonzaga provides such a directory at http://barney.gonzaga.edu/email. This page also has links to several sites that search the Internet for e-mail addresses and add them to their databases similar to how web search engines build their databases.


Search for E-Mail Addresses at Gonzaga - Netscape
File Edit View Go Communicator Help
Back Forward Reload Home Search Guide Print Security Stop
Bookmarks Location: http://barney.gonzaga.edu/email/
Instant Message Internet Lookup New&Cool
Gonzaga University
E-Mail Directory
E-Mail Search Locations
Four11
Excite
Internet Address Finder
Switchboard
Yahoo! White Pages
This directory contains e-mail addresses for faculty, staff, and current students at Gonzaga. To locate an address, enter the first and/or last name of the person for whom you are searching, select a group, and then click "Search." Leaving a field blank will match all entries in that field.
First Name: Matt
Last Name: Wood
Group: All Student Faculty/Staff
Search
Document: Done

If you are looking for the e-mail address of a specific person, you can see if the company they work at or the school they attend has an online directory like Gonzaga’s. You can also search one of the national e-mail directories for their name and e-mail address or you can even search one of the web search engines like Alta Vista or Yahoo for their name.

For More on Netscape Communicator

Netscape Communicator has many features that cannot be covered here. For information on these features, use Communicator’s built-in help system. To access help, use the “Help” menu inside of Communicator.

Enjoy the Web!

Using Usenet News

What is Usenet?

Usenet is a network of thousands of servers on the Internet that distribute thousands of discussion groups called newsgroups. Each server can be configured to carry a select number of the newsgroups or all of the newsgroups. These "news" servers periodically connect with one another to pass along any new articles that were created on its server or that were passed to it by another news server. Because of this distributed architecture, an article posted on Usenet may take several days to be distributed to all of the news servers that carry the newsgroup where the article was posted.

Barney is Gonzaga's news server and carries only a portion of the total newsgroups on Usenet. At present this is more than 8000 newsgroups; these newsgroups include the majority of the most commonly used newsgroups. There are more then 24,000 other newsgroups that are either regional, for companies, or for a very specific group. Requests for adding a newsgroup that Gonzaga doesn't carry can be sent to Greg Francis at francis@gonzaga.edu. As an example, the Seattle newsgroups were added at the request of someone from the Seattle area. Newsgroups designated for the posting of files will not be carried because of the excessive disk space required to store the files.

What is a Newsgroup?

A newsgroup is a discussion area on Usenet that was created for the posting of a specific topic. Topics can be anything; examples include artificial intelligence, Friends, politics, and skydiving. Many of these newsgroups are purely for entertainment while others can yield valuable information for research projects. One thing to remember about newsgroups is that anyone can post to them; this means all information on Usenet should be questioned and verified.

In addition to the Usenet newsgroups, there is a set of newsgroups that are local to Gonzaga. Each of these newsgroups begin with "gu." to indicate it is local to Gonzaga. Anything posted in one of these groups is not distributed outside of the university. Topics for the Gonzaga newsgroups include announcements, events, and the sale of textbooks and other items. Clubs and other campus organizations can request a newsgroup of their own by contacting Greg Francis at francis@gonzaga.edu.

To make finding newsgroups easier, the newsgroups are given names that group them into categories and subcategories. For example **rec.skydiving** means the subject of **skydiving** in the **rec**reation category. Newsgroup names can get fairly complex; for example **rec.arts.sf.tv.babylon5.info** is for information on the science fiction television show Babylon 5. Fortunately, newsgroup names are searchable making it much easier to locate topics of interest.

A Note about Usenet Etiquette

Since articles posted to Usenet are distributed to thousands of news servers around the world and can be read by millions of people, it's important that users understand how to post correctly and that they understand proper Usenet etiquette. Before posting, you should look at the articles in **news.announce.newusers** and **news.answers**. One particularly good article is *A Primer on How to Work With the Usenet Community* by Chuq Von Rospach. This article is posted frequently in both news.announce.newusers and news.answers; it is also located on Barney's web site at http://barney.gonzaga.edu/tech/usenetcommunity.html.

Breaking the rules of Usenet can result in a lot of hostile mail (called flames) from other users on Usenet. Using Usenet can be fun and informative but it's important to be knowledgeable about posting and be prepared to have your opinions blasted by others that disagree with you.

Using Netscape Communicator to Read Usenet News

Netscape Communicator is equipped with a module called Collabra that allows you to subscribe to and read newsgroups on Barney. The following instructions assume that you have already set up the news server (news.gonzaga.edu) when configuring Netscape Communicator.

To read articles in Usenet news, do the following:

1. Open Netscape Communicator.

2. Select "Newsgroups" from the Communicator menu.

   This will open your Message Center window.

3. Expand the newsgroup list by clicking on the minus sign next to news.gonzaga.edu on the PC or the small triangle on a Mac.

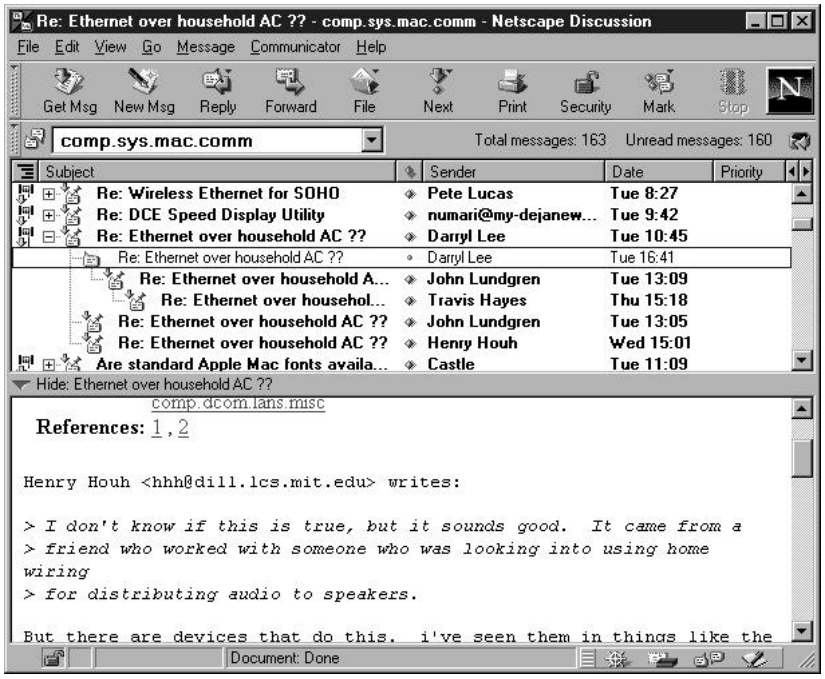
4. To read the articles in a newsgroup, double-click on the name of the newsgroup you want to read.

   Note: If you aren't currently subscribed to any newsgroups, see **Subscribing to Newsgroups**.

   Communicator will open a new window for the newsgroup you double-clicked on. The window will be divided into two panes, the top pane will list all the articles in the newsgroup and the bottom pane will show the text of the currently selected article. Unread articles will be bold text and previously read articles will be plain text.

5. To read an article, click on the article subject.

   Note: Articles with the same title are grouped into a "thread" to make it easier to follow the discussion. Threads are indicated by a plus sign (PC) or a triangle (Mac). A thread can be expanded or contracted by simply clicking on the appropriate symbol.


Re: Ethernet over household AC ?? - comp.sys.mac.comm - Netscape Discussion
File Edit View Go Message Communicator Help
Get Msg New Msg Reply Forward File Next Print Security Mark Stop
comp.sys.mac.comm
Total messages: 163 Unread messages: 160
Subject Sender Date Priority
Re: Wireless Ethernet for SOHO Pete Lucas Tue 8:27
Re: DCE Speed Display Utility numari@my-dejanew... Tue 9:42
Re: Ethernet over household AC ?? Darryl Lee Tue 10:45
Re: Ethernet over household AC ?? Darryl Lee Tue 16:41
Re: Ethernet over household A... John Lundgren Tue 13:09
Re: Ethernet over household... Travis Hayes Thu 15:18
Re: Ethernet over household AC ?? John Lundgren Tue 13:05
Re: Ethernet over household AC ?? Henry Houh Wed 15:01
Are standard Apple Mac fonts availa... Castle Tue 11:09
Hide: Ethernet over household AC ??
comp.dcom.lans.misc
References: 1, 2
Henry Houh <hhh@dill.lcs.mit.edu> writes:
> I don't know if this is true, but it sounds good. It came from a
> friend who worked with someone who was looking into using home wiring
> for distributing audio to speakers.
But there are devices that do this. i've seen them in things like the
Document: Done

6. To reply or post a response to the current article, click on the "Reply" button.

   By default, your response will be sent back to the poster of the article via e-mail. If you want to post back to the newsgroup itself, click and hold down the "Reply" button then select "to Discussion" from the list. Other options for posting are also available.

   Once you've completed your message/article, send it by clicking on the "Send" button.

7. If you want to post a new article, click on the "New Msg" button.

Subscribing to Newgroups

Before reading a newsgroup, you must subscribe to it so that it will be listed in your Message Center window. Subscribing to a newsgroup merely tells Netscape Communicator that you want it to be listed in the Message Center window and that it should keep track of which articles you have already read. It does not mean that you will receive mail from the newsgroup nor does it inform anyone else that you are subscribed to the newsgroup. You can subscribe or unsubscribe to a newsgroup at any time.

To subscribe to a newsgroup:

1. Launch Netscape Communicator.

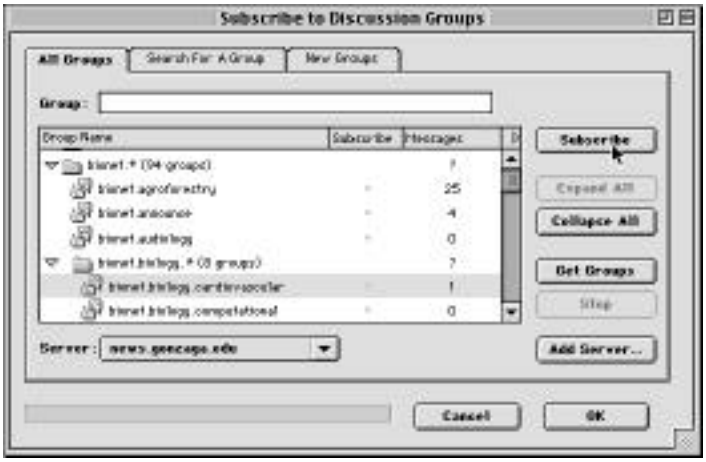
2. Select "Newsgroups" from the Communicator menu.

3. Select "Subscribe…" from the File menu.

A “Subscribe to Discussion Groups” window appears that lists all the newsgroups on the current news server (in this case, news.gonzaga.edu). By default, it will list all the major categories and the number of newsgroups in each category.

4. To expand a category (or a sub-category), click on the plus sign (PC) or triangle (Mac) next the category.

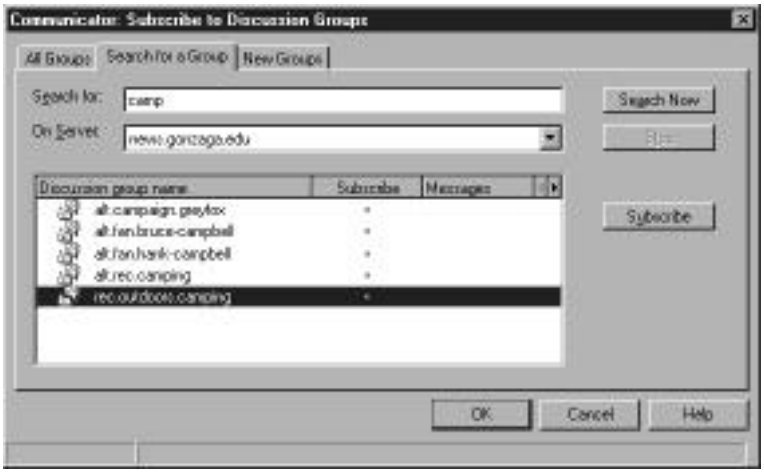
   The sub-categories and newsgroups under the category you expanded will now be listed below the category name.



5. To subscribe to a newsgroup, click on the newsgroup name and then click on the “Subscribe” button.

6. Once you are done subscribing to newsgroups, click the “OK” button.

You can also search for newsgroups by clicking on the “Search For a Group” tab, entering a keyword for the topic and then clicking “Search Now.” To subscribe to one of these groups, simply click on the group and click “Subscribe.” You may need to try various synonyms for the topic or shortening the search down to just a partial word before you are able to locate an appropriate group.



While there are many thousands of groups, there is not one for every topic imaginable so you may not be able to find the topic you are interested in. If that’s the case, you might look for a more general topic newsgroup that would be appropriate for the discussion of the topic you have in mind.

Unsubscribing from Newgroups

If you are no longer interested in reading a particular newsgroup, you can easily unsubscribe from it. To unsubscribe from a newsgroup, simply click on the newsgroup name in the Message Center window and press the “Delete” key on your keyboard. This will remove the newsgroup from your subscription list and delete any information about the newsgroup from your Netscape Communicator configuration.

Dealing with High Volume Newgroups

When you're reading a newsgroup, there will often be messages that you don't read. This is especially true on high volume groups that can get hundreds of new articles a day. To reduce the clutter of a high volume newsgroup, you can mark all the articles as read and then only view unread articles. This will reduce the total number of articles listed, making it much easier to browse through.

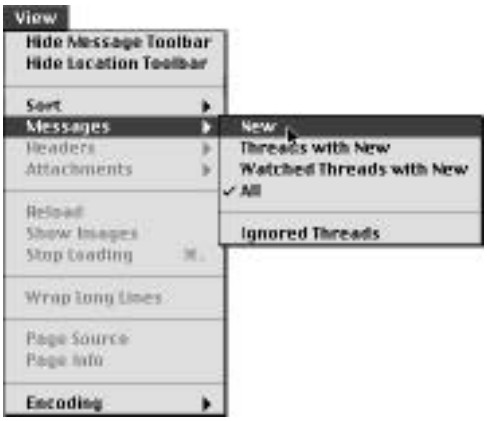
To do this, do the following:

1. Open the newsgroup and read the articles you are interested in.

2. When you are done reading articles, click and hold down the "Mark" button and then select "All Read" (PC) or "Mark All Read" (Mac).

3. Next time you open the newsgroup for reading, select "Unread" under the Messages sub-menu in the View menu.

   This will hide all the previously read articles.



Advanced Topics with Usenet News

Netscape Communicator has many advanced features when working with Usenet. These include the following:

- Posting to multiple newsgroups simultaneously
- Sorting by creator of the articles, date, or other option
- Keyboard commands for navigating articles and threads
- Viewing graphics and HTML code within the article viewer

For more information on these and other topics, see Netscape Communicator's help system.

A Note about Usenet and Spam

Because of Usenet's distributed nature, it is a prime target for spammers to post their spam on and to "harvest" e-mail addresses to mail spam to. Every time you post an article on Usenet, your e-mail address is being distributed all over the world to thousands of servers. Spammers collect the e-mail addresses of Usenet posters and add them to their spamming lists. We attempt to block spam coming into Gonzaga, but posting to Usenet will increase the likelihood that you will receive spam messages.

Using Electronic Mail (Communicator)

Electronic mail, more commonly referred to as e-mail, is one of the oldest and most popular uses of the Internet. Gonzaga's electronic mail system allows you to communicate with other students, faculty, and staff on campus and anyone that is connected to the Internet, either directly or through an online service such as America Online. Electronic mail has historically been the most popular network service at Gonzaga.

Students are provided a number of e-mail clients to choose from. The two supported clients are Netscape Communicator and Pine. Pine is a text-based mail program on Barney accessed using telnet and is described in the section "Using Electronic Mail (Pine)." Netscape Communicator is a free graphical client available for both the Macintosh and Windows that also includes a web browser, a Usenet client, and other capabilities.

This document will provide some basic information regarding e-mail and will also provide information on using Netscape Communicator for e-mail.

Your E-Mail Address

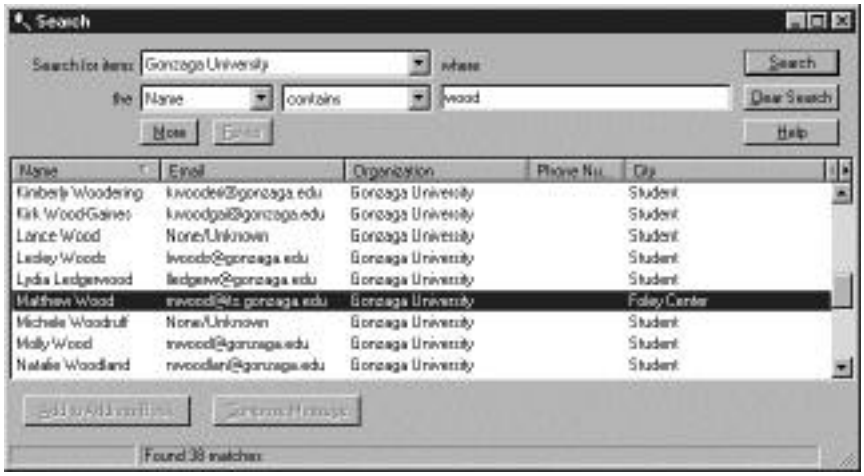
Everyone at Gonzaga has the option of getting an account on Barney. For those that are using these accounts for e-mail, their e-mail address is **userid@gonzaga.edu** where "userid" is your account name. For example, if my name was Jane Doe and my userid (account) was jdoe, my e-mail address would be jdoe@gonzaga.edu. Students using other servers would put the server name and domain after the "@." As an example, if Jane were on the Grace server in Computer Science, her address would be jdoe@cps.gonzaga.edu. Most students will use Barney as their e-mail server so their address will end with "@gonzaga.edu."

Locating an E-mail Address for Someone at Gonzaga

It is often desirable to locate another person's e-mail address to send them mail. Gonzaga has a search engine on the Web and on Barney to look for someone's e-mail address based on either their first or last name. The web-based search is at http://barney.gonzaga.edu/email.

If you telnet into Barney, you can type "mailid *keyword*", replacing *keyword* with a portion of the person's name (e.g., "mailid jane" would list all of the Janes at Gonzaga).

Gonzaga also has something called the “Gonzaga White Pages.” These white pages can be searched from either Netscape Communicator or from within Pine.



To search the white pages from within Netscape Communicator, do the following:

1. Select “Address Book” from the Communicator menu.

2. Click on “Gonzaga University” in the Directory list.

   Note: If Gonzaga University isn’t listed, go to the section titled “Configuring Netscape Communicator 4.6” to add the directory (step 13).

3. Enter part of the name of the person you want to search for in the “Show names containing” field. For a more advanced search click on the “Search for…” button.

   Note: Students that have requested confidentiality will not appear in the e-mail directory. If you are on the directory and would like to be removed, contact Greg Francis at x6896 or francis@gonzaga.edu.

4. Click on the person you would like to send mail to and click the “New Msg” button. A dash in place of their e-mail address indicates the person doesn’t have a known e-mail address.

Accessing E-Mail from within Netscape Communicator

Netscape Communicator contains a module called Messenger. This module is the one that is used to read, compose, and manage your mail. In Windows 95, Messenger is actually a separate program called Netscape Messenger. This provides Windows 95 users the option to run Netscape Messenger without running Netscape Navigator, Communicator’s web browser module. On the Macintosh, Messenger is an integrated part of Netscape Communicator so all of the features are loaded at the same time.

Whether you are using a Macintosh or Windows 95, you can select “Messenger” to gain access to your e-mail. Windows 95 have the additional option of opening “Netscape Messenger” from the Start menu; this takes you right into your Inbox.

Checking and Reading Mail in Netscape Communicator (POP3)

When using POP3, your mail must be downloaded from Barney to your local computer before it can be read. Once it is on your local computer, it can be read, replied to, filed, and/or deleted. All mail folders are stored on your local hard drive. All new mail is downloaded from Barney into your Inbox folder.

You can either have Netscape Communicator check mail for you automatically or you can force it to check for mail by selecting "Get New Messages" from the File menu. Netscape Communicator must be running on your computer in order for it to automatically download mail. For setting up automatic checking of mail, see the section titled "Configuring Netscape Communicator" earlier in this manual.

If you have new mail on Barney, Netscape Communicator will download all of the mail to your local computer. If the messages are long or contain file attachments, this may take a few moments. When you receive new mail, the Unread column for your Inbox folder in the Message Center window will indicate that you have unread messages.

To read the mail in your Inbox, do the following:

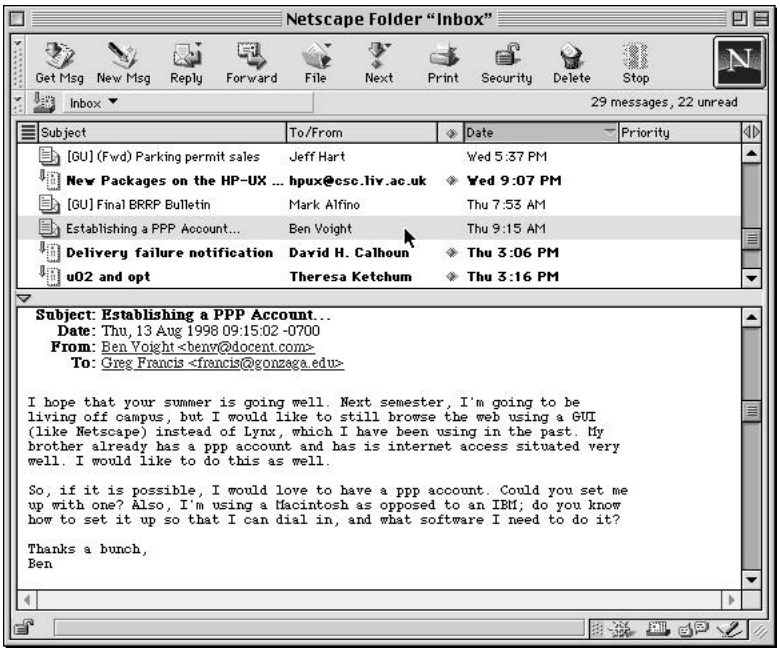
1. Select "Messenger" from the Communicator menu.

2. If you check mail manually, click the "Get Msg" button to download your new mail.

3. Double-click on "Inbox" to open your Inbox.

4. Click on the message that you want to read. The text of the message will appear below.

5. Once you've read the message, you can delete it by clicking on the "Delete" icon at the top of your Inbox window or you can file it into another folder by clicking on the "File" icon.


Netscape Folder "Inbox"
Get Msg
New Msg
Reply
Forward
File
Next
Print
Security
Delete
Stop
Inbox
29 messages, 22 unread
Subject
To/From
Date
Priority
[GU] (Fwd) Parking permit sales
Jeff Hart
Wed 5:37 PM
New Packages on the HP-UX ...
hpux@csc.liv.ac.uk
Wed 9:07 PM
[GU] Final BRRP Bulletin
Mark Alfino
Thu 7:53 AM
Establishing a PPP Account...
Ben Voight
Thu 9:15 AM
Delivery failure notification
David H. Calhoun
Thu 3:06 PM
u02 and opt
Theresa Ketchum
Thu 3:16 PM
Subject: Establishing a PPP Account...
Date: Thu, 13 Aug 1998 09:15:02 -0700
From: Ben Voight <benv@docent.com>
To: Greg Francis <francis@gonzaga.edu>
I hope that your summer is going well. Next semester, I'm going to be living off campus, but I would like to still browse the web using a GUI (like Netscape) instead of Lynx, which I have been using in the past. My brother already has a ppp account and has is internet access situated very well. I would like to do this as well.
So, if it is possible, I would love to have a ppp account. Could you set me up with one? Also, I'm using a Macintosh as opposed to an IBM; do you know how to set it up so that I can dial in, and what software I need to do it?
Thanks a bunch,
Ben

Note: It is recommended that you either delete the mail from your Inbox or file it to another mailbox if you want to keep it for later use. This keeps your Inbox uncluttered and will help it respond quicker, especially on older computers.

6. Once you are done reading messages in your Inbox, close the Inbox window.

   Note: You can read the mail in any other folder by double-clicking on that folder name and repeating the same steps above.

Creating Folders for Storing Mail (POP3)

You can create additional folders to file your mail in so it doesn't clutter your Inbox. This is useful because it also allows you to group all the mail for one topic or person into a single location. To create a folder, do the following:

1. Open the Message Center by selecting "Messenger" from the Communicator menu.

2. Click once on the "Local Mail" folder to hilight the folder. This is where the folder will reside.

3. Select "New Folder…" from the File menu.

4. Enter the name of the new folder and click "OK."

Checking and Reading Mail in Netscape Communicator (IMAP)

When using IMAP, portions of your mail will reside on the remote server (Barney) and portions can reside on your local drive. This allows you the maximum flexibility when using Netscape Mail but it can also be somewhat confusing as well.

Reading and filing mail with IMAP is nearly identical to using POP3 with the exception that IMAP adds a third folder to your message center. This folder is called "barney.gonzaga.edu." It contains your Inbox on Barney and any mail folders you have on Barney as well. Any folder in here is also going to be accessible from Pine. Folders that reside in "Local Mail" are on your local hard drive and cannot be accessed by Pine.

To read your mail, follow the same steps as you would for reading POP3 mail above but open up the Inbox in "barney.gonzaga.edu" instead of the one in "Local Mail." The same applies for creating mail folders and filing mail. You can create mail folders either on Barney or your local drive. If you want it to be available from Pine, create the folder in "barney.gonzaga.edu."

Composing New Mail

Netscape Communicator makes it easy to compose new e-mail messages. It includes an address book feature, the ability to easily attach files to messages, and also the ability to copy text from a word processor directly into an e-mail message.

To create a new message, do the following:

1. Launch Netscape Communicator.

2. Open the Message Center by selecting “Messenger” from the Communicator menu.

3. Select “Message” from the New sub-menu in the File menu.

   An empty message window will appear.

3. Enter the recipient’s address in the “To:” field. To enter multiple addresses, just press the Enter key (Return on Macs); Communicator will add additional To: lines as needed.

4. Enter the subject of the message in the “Subject:” field.

5. Click in the body of the message and either type the message or copy and paste the message from another program.

6. If you wish to attach a file to the message, do the following:

   a. Click on the “Attach” icon at the top of the message window.

   b. Locate the file you want to attach, highlight it and click “Open” (“Attach” on Macs).

7. Click on the “Send” button in the message window to send the message.

For More Information

Netscape Communicator includes an extensive help system for those that want to learn about its more powerful features including address books, file attachments, signatures, and keyboard shortcuts. Help on these additional features is under the “Help” menu.

Using Electronic Mail (Pine)

General Information

Pine is an e-mail program located on Barney and is accessible through any telnet application that supports VT100 terminal emulation or better. The primary benefit of Pine over other e-mail programs is that it is accessible from anywhere on the Internet. Whether you are in Spokane, Florence, or at home, if you have Internet access, you can get to Pine.

Pine help is context-sensitive. In other words, each Pine screen you use will have its own help text, explaining the choices available for that screen. Pressing the '?' key (^G when composing) will display the help screen for the screen you are currently viewing in Pine. The bottom two lines of the screen are used to list the commands currently available. If there are more commands available than will fit on a screen, the 'O' key will page through the list of available commands.

When composing mail, and in a few other places in Pine, you have to use control keys. Control keys are entered by pressing the '<CTRL>' key and the appropriate letter key at the same time. In Pine, control key commands are shown as a '^' followed by a letter key. For example, '^X' would mean that you need to press the '<CTRL>' key and the 'X' key simultaneously.

Electronic Mail Addresses

Each user on the Internet has a unique address. This address is composed of the user's account followed by an "@" and then the server where the account is located. For example, if a user had an account of "horatio" on a server known to the Internet as "iea.com," their address would be "horatio@iea.com." The user's account does not have to correspond to the user's name.

Most users at Gonzaga have an Internet address of "*username*@gonzaga.edu." For students, the account is usually their first initial followed by the first seven characters of their last name. For faculty, the first eight characters of their last name are used for their account. This will depend upon whether or not there are people with similar names. When addressing mail to someone at "gonzaga.edu," only the account name is required.

Gonzaga provides several ways to look up student and employee e-mail addresses. User's can search the web at http://barney.gonzaga.edu/email, type "mailid" followed by a person's name while at the $ prompt in Barney, or search the Gonzaga White Pages through Pine (see below).

Entering and Exiting Pine

To run Pine, simply enter the command "pine" at the "[*username*]$"prompt. This will take you directly into the "INBOX" folder, whether or not you have any new mail.

Typing ‘Q’ from most places in Pine will exit Pine and return you to the “[*username*]$” prompt.

Pressing ‘^Z’ in Pine will temporarily suspend Pine. Typing “fg” at the “[*username*]$” prompt will resume a suspended Pine session. This is useful for users that often use the unix command line for programming, viewing files, and other tasks.

Reading Your E-Mail

The INBOX message index is the first screen you see when entering Pine. This is where any new mail will appear. Any mail you have read will remain here until you either file it to another folder or delete it. A “+” in the first column of the message index means that the message marked is addressed specifically to you. If no “+” is shown, you are not the primary recipient of the message. The two most common reasons for receiving a message not addressed specifically to you is if the message is from a mailing list you are a member of or if the message was CC’d (carbon copied) to you.

Choose the message you wish to read by highlighting it using the up or down arrow keys. Once the appropriate message is selected, press the ‘>’ or ‘<ENTER>’ key to view the message. To scroll through the message, you may use the arrow keys, or the ‘-‘ key for the previous page and the space bar for next page of a long message.

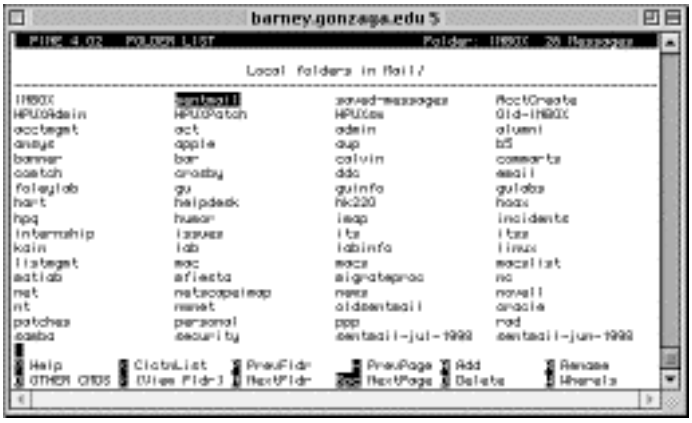
While you are either reading the message, or while you have the message highlighted in the index, you may press ‘R’ to reply to the message, ‘F’ to forward the message, or ‘D’ to delete the message. Messages marked for deletion will not be purged until you exit Pine. You may undelete a message that hasn’t been purged yet by pressing the ‘U’ key. If you do not delete the message, or move it to another folder, it will remain in your INBOX folder.

To return to the index of mail, press ‘I’. Pressing ‘P’ will move you to the previous message and ‘N’ will move you to the next message in your INBOX.

Creating/Using Folders

Pine gives you the opportunity to create folders to store your messages in other than the INBOX folder. To create a folder, press ‘L’ to list your folders. At this point, a new screen will appear with the word “Mail” highlighted. Pressing the ‘<ENTER>’ key will list on the folders in your Barney account. If you wish to add a new folder, press ‘A’ for Add. Pine will ask you the “Folder name to add:.” Type in the name for the folder and press ‘<ENTER>.’ You will see the name of the new folder added to your expanded folder list.

You may save a message to a folder either while you are reading the message, or while you have the message highlighted in the message index. In either of these situations, press ‘S’ to save. You will then be prompted with a message similar to: “SAVE to folder in <Mail/[]}> [postmaster]:”. Type the name of the folder you wish to save the message in and press ‘<ENTER>.’ Your message will be moved to the new folder and marked for deletion in the current folder.



You can switch between folders by pressing ‘L’ and then ‘<ENTER>’ to get the list of folders, then using the arrow keys to select the folder you want to open, and then pressing ‘Enter’ again to open the selected folder.

Folders are an excellent way to store e-mail messages for later use and are highly recommended for those that want to keep their e-mail messages after reading them.

Sending E-Mail

To send an e-mail message, type ‘C’ to compose. You will be prompted for the primary recipient’s address (To:), other recipients’ addresses (Cc:), files to attach (Attchmnt:), and the message subject (Subject:). Any of these may be left blank, except the To: field. After scrolling through the top options with the ‘<ENTER>’ key or the down arrow, you will see the cursor resting in the “Message Text” area. It is in this area which you enter your message.

When you are ready to send the message, simply press ‘^X’ (Control-X) to Send. You will then be prompted with “Send Message?” At this point you will either type in ‘Y’ for Yes or ‘N’ for No. ‘N’ will take you back to the message editing area. If you wish to cancel the message without sending it, press ‘^C’ for Cancel at the message editing area.

When the cursor is at the To: or Cc: field, you can search either your address book or the Gonzaga White Pages by pressing ‘^T.’ After pressing ‘^T,’ select whether you want to search your address book or the white pages and then enter the first or last name of the person you are looking for. You select the address you wish to send to by hilighting the person’s name and pressing ‘<ENTER>.’ Note that people are listed even if they don’t have an e-mail address.

Creating a Signature File

A signature file is a text file whose contents will automatically be appended to the end of outgoing messages. It typically contains information such as your name, e-mail address and organizational affiliation. Pine adds the signature into the message as soon as you enter the composer so you can choose to remove it on a message by message basis. For example:

```
*******************************************************
Mickey Mouse, Ph.D
President, Walt Disney University
1-800-PIP-SQUK
MOUSE@DISNEY.COM
*******************************************************
```

To create a signature file, press ‘M’ to go to the main menu, then ‘S’ to select a configuration option, and finally ‘S’ to edit your signature. When you are done editing your signature, press ‘^X’ to exit the editor and ‘Y’ to save your changes. You may also create a “.signature” file in your home directory using a text editor such as pico, vi, or emacs. This text file is the same as creating the signature directly in Pine.

Attachments

You may attach a file to your e-mail message. To do this, the file must be located in your home directory on Barney. At the “Attchmnt:” prompt in your message editing area, simply type the name of the file located in your home directory. If you have created a sub-directory in which the file is stored, you must include the name of this directory in your filename. Once you have entered the name of the file, you may complete your message and send it to the recipient. You may attach more than one file to a message. You may also browse files in your home directory by pressing ‘^T’ while the cursor is at the “Attchmnt:.”

There may be times when you receive an attachment that Pine cannot read. Because Pine is a text based system, it is not able to display many types of attachments such Word and WordPerfect documents, spreadsheets, graphics, and html documents. These documents must first be saved in your home directory and then transferred to a computer (typically a PC or a Mac) that is capable of viewing that type of file.

To save an attachment from a message you’ve received, open the message, press ‘>’ to view the attachments, select the attachment to save using the arrow keys, and then press ‘S’ to save the attachment. Pine will often provide a default file name. If not, you can enter any filename you want and then press ‘<ENTER>’ to save the attachment as a file in your home directory. You can now transfer the file to a PC or Mac using an FTP application. For more information on FTP, see the document *Transferring Files To and From Barney (FTP)*. This document is also available in the ZagNet Manual.

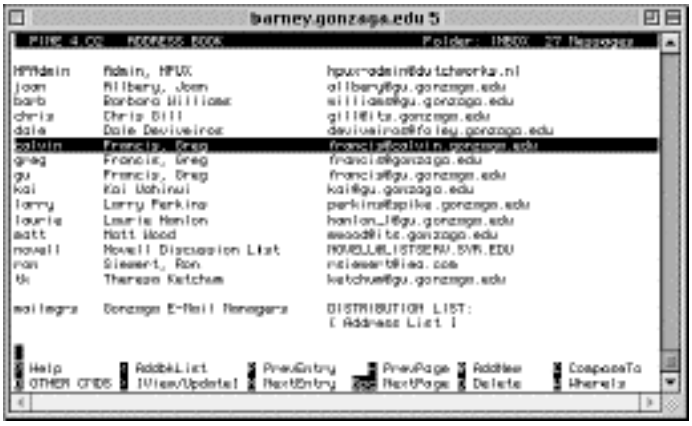
Using the Pine Address Book

Pine's address book allows you to keep a list of addresses you send mail to so you do not have to remember addresses that are often complex. Each entry in the address book has three required fields which are:

Nickname: A short, easy-to-remember label to identify the entry. This is what you type in as you are addressing the message in the composer. If there is a matching entry in your address book(s), Pine will extract the corresponding FullName and Address fields to generate the actual address for your message.

Fullname: A longer field where you can put the full name of the person or organization. Whatever you put as the name here will appear on the message when it is finally delivered.

Address: The actual e-mail address(es).



To add an alias to your address book, press 'M' to go to the main menu and then 'A' to update your address book. Press the '@' key to add an alias to the address book. You will be prompted for the three required elements above. Once these elements are entered, the alias is available for your use. Simply enter the alias in the To: field of your message composer area.

You may also easily create a distribution list. Each distribution list has a nickname, a full name, and a list of addresses. The addresses may be actual addresses or they may be other nicknames in your address book. They may even refer to other distribution lists. A distribution list is created the same way as an address for a single person; the only difference is that you enter multiple addresses on the "Addresses:" line by separating each address with a comma.

Printing Your Messages

To print an e-mail message, you must first let Pine know where you would like the message to print. Type "help printing" at the "[*username*]$" prompt to find the appropriate command.

At the Main Menu in Pine, type 'S' for Setup. Once in Setup, choose 'P' for Printer. You will then be given three options. At this point enter arrow down to the "Personally selected print command" option and press '<ENTER>'. When asked "Command for custom printer:" enter the information which you retrieved from the "help printing" area in Unix. This printer will then be used each time you print, unless you choose another printer.

Using Telnet

Telnet is a method of logging into a server and accessing those server's resources remotely. Access is usually text-based and requires some knowledge of the system you are telnetting into. At Gonzaga, Barney, Libris, and Grace can all be accessed through telnet. In order to use the applications on Barney or Grace, you must use telnet. Barney e-mail is available through telnet (Pine), POP, and IMAP (both Netscape Communicator). Libris can also be accessed through the World-Wide Web at http://libris.gonzaga.edu.

The ZagNet software includes a telnet client for you to use. Students with PCs will use QvtNet and Macintosh users will use NCSA Telnet. Configuration of the software is different on the two platforms but once you are connected to a server (e.g., Barney), the commands are all the same since the commands are being executed on the remote server, not the local machine.

A Typical Telnet Session

A telnet session begins by connecting to remote server, logging into the server, executing commands on the server and then logging out of the server. The following is the list of steps required to log into Barney that will work with any telnet client. The specific commands required for individual telnet clients are not included.

To connect:

1. Launch the telnet client.

2. Open a new session.

3. Enter the name of the server you want to connect to (e.g., barney.gonzaga.edu) and begin the session.

4. Log into the remote server using an account (Barney or Grace) or as a guest (Libris).

Once you are connected, you will typically have a command line on which to type commands. These commands are then executed on the remote server. Any files, messages, etc. you see are on the remote server, not your computer.

To disconnect:

1. Normally you will type a command to log out. On Barney and Grace it's "exit" and on Libris it is "//exit." Other systems may use different commands such as "logout" or "quit."

2. Quit the telnet client.

Using Telnet Clients Included with ZagNet

QvtNet (Windows)

The following are instructions for using QvtNet to telnet.

To open a connection to Barney or Libris (Library):

1. Launch “terminal” in Start–>QvtNet.
2. Select “Open…” from the File menu to bring up the “Open Session” window.
3. Type “barney” or “foley” and then click “OK.”

To open a connection to any other remote server:

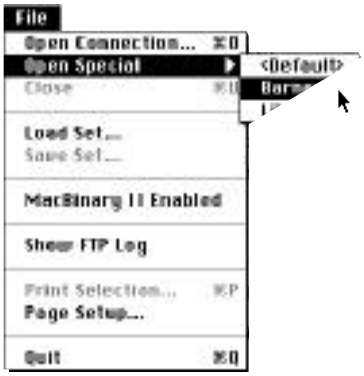
1. Launch “terminal” in Start–>QvtNet.
2. Select “Open…” from the File menu to bring up the “Open Session” window.
3. Type the remote server you want to connect to and click “OK.”

NCSA Telnet (Macintosh)

NCSA Telnet comes preconfigured for accessing Barney and Libris (Library) and does not require any additional configuration. Opening a connection to Barney and Libris are as easy as selecting a menu item.

To open a connection to Barney or Libris (Library):

1. Launch NCSA Telnet.
2. Select the remote server from “Open Special” under the File menu.



To open a connection to any other remote server:

1. Launch NCSA Telnet
2. Select “Open Connection...” from the File menu.
3. Type the remote server you want to connect to and click “Connect.”

Downloading Files using FTP

Transferring files to and from Barney or other server is done using the **F**ile **T**ransfer **P**rotocol, more commonly referred to as FTP. Using FTP, you can transfer files to and from Barney regardless of whether you are using a PC, a Mac, a UNIX server halfway around the world, or any other type of computer that supports FTP.

How FTP Works

FTP works by having an FTP client log into an FTP server. Barney is configured as both an FTP client and server so you can both log into and out of Barney using FTP. Personal computers are typically only an FTP client. FTP clients can only log into FTP servers, no one can log into an FTP client. This is done to keep others from logging into a computer without authorization and transferring files to or from that computer. FTP servers must be configured with accounts and passwords to ensure sufficient security.

When logging into an FTP server, an FTP client must enter an account and password. Many FTP servers are configured with an account called “anonymous.” This account allows a user to login and download files from the server even though they don’t have an account on the FTP server. This is commonly used on servers that archive software such as shareware and public domain software and are commonly known as “Anonymous FTP Sites.” Barney allows anonymous logins for downloading software used for ZagNet.

Once an FTP client has logged into an FTP server, the user is able to view file directories, download and upload files to the server, and even delete files if they have proper authorization.

Logging into an FTP Server

How you log into an FTP server will depend on whether you are using a command line interface such as UNIX or a graphical interface such as Mac or Windows. From UNIX (e.g., Barney) or other command line interface, you would type **ftp server_name** (e.g., **ftp barney.gonzaga.edu**) to log into the specified server. If a successful connection occurs, you will be prompted for your username and password. If you are connecting with an anonymous FTP site, type **anonymous** for the username and your e-mail address as the password. If you have entered a valid username and password, you will then have a prompt from which to enter commands.

Graphical FTP Clients

Graphical user interface (GUI) operating systems such as Mac and Windows normally don’t require you to enter commands directly. Regardless of the FTP client software you use on a GUI computer,

you must first open a connection and then enter a username and password. Once you have logged in, you will typically be able to browse files and directories just as you would on your local hard drive. Many of the following instructions have little relevance to GUI users since they typically don't need to enter commands directly. Some FTP client software for GUI computers (e.g., WinQVT for Windows) does require the entering of commands.

Listing Files and Directories

When you are connected to an FTP server, you can view a listing of files on that server by entering the command **ls** or **dir**. This will list all of the files and directories in the current directory. If you FTP into Barney, the current directory starts as your home directory. Here is a typically listing from **ls**:

```
-rw-r--r--   1 francis  cis        21103 Aug  6 13:28 ANSYS52
drwx------   2 francis  cis         1024 Aug 12 08:40 Mail
drwxr-xr-x   2 francis  cis         1024 May 31 08:17 bin
-rw-r--r--   1 francis  cis           27 May 29 15:11 forward
drwxr-xr-x   2 francis  cis         1024 Aug  2 17:56 manpgasc
drwxr-xr-x  10 francis  cis         2048 Aug  5 15:39 public_html
-rw-r--r--   1 francis  cis       153238 Jul 10 16:27 unx_staff.lis
-rw-r--r--   1 francis  cis       458473 Jul 10 16:27 unx_students.lis
```

Those lines that begin with a "d" indicate directories (e.g., "Mail" and "bin" above) and those that begin with a "-" are files (e.g., "forward" above). The number near the center of each listing (e.g., "153238" for "unx_staff.lis") is the size of the file in bytes. Finally, the name of the file or directory is at the far right of the listing (e.g., "public_html").

If there are a great deal of files in the current directory, you can limit the listing to a select group of files by setting criteria for the **ls** command. For example, **ls a*** would list only those files that begin with the lowercase letter "a."

To list files in your local directory (i.e., where you are FTPing from), the command will vary depending on which FTP client you are using. Common ones include **lls** (local listing), **ldir** (local directory), and **!ls -l** (the **!** executes a command on your local computer). If none of these work, check **help** while at the "FTP>" prompt for a list of available commands.

Changing to a Different Directory

Quite frequently, you will want to transfer files to or from a directory that is not the default directory you logged into. To change to a different directory, you will use the **cd** command. For example, to change to the "public_html" directory in the listing above, you would type **cd public_html**. Type **cd ..** to go to the parent directory of the current directory. Another option is to enter an absolute path name such as **cd /home/staff/cis/francis**. Following are some examples of changing the current directory:

`cd manpgasc`	Changes to the manpgasc directory in the current directory
`cd ..`	Changes to the parent directory of the current directory
`cd /home/staff/cis/francis`	Changes to the directory /home/staff/cis/francis

Once you have changed to the new directory, use the **ls** command will list the files in the new directory.

As with listing files in a local directory, the commands for changing directories also varies depending upon the FTP client you are using. The two most common options are **lcd** and **!cd**. Consult **help** in FTP for the specific command in your FTP client.

ASCII and Binary Files

Files can either be stored as ASCII or binary files. ASCII files are typically text files created by text-based editors such as Notepad, SimpleText, vi or pico. ASCII files contain only 7-bits of data per character while binary files are composed of 8-bit characters. Types of binary files include applications, word processor documents, graphic files, and most other types of files. Most documents generated on a PC or a Mac are binary files.

A special type of Macintosh file is MacBinary; this is a binary file that preserves Macintosh specific information for the file including the type of document and the application that created it. When transferring files from a Macintosh for use on a different type of computer, transfer files using plain **binary** rather than MacBinary.

When transferring files with FTP, you need to set whether to transfer the file as ASCII or binary. If you are unsure which method to use, transfer the file using binary mode. ASCII mode should typically be used for text files and files ending with ".uu" or ".hqx." To set ASCII mode, type **ascii** while connected to an FTP server. For binary mode, type **binary**. To determine which mode you are in, type **type**.

Transferring Files

Once you have connected to the remote FTP server, logged in with a valid user name and password, set the appropriate local and remote directories, and set the correct transfer mode (ASCII or binary), you are ready to transfer files. To transfer files to the FTP server from where you logged in from, use the **send** command. To transfer files from the FTP server to where you logged in, use the **recv** command. Using either **send** or **recv**, you specify the name of the file you want to transfer. For example, to send a file named "sample" from the local computer to the FTP server, you would type **send sample**. Some FTP clients allow you to use wildcards such as "*" to transfer many files at once, others do not.

Depending on the size of the file being transferred, the time needed to transfer the file can take a second to several hours. Gonzaga's Internet connection is sufficient to transfer most files in

under five minutes unless the file is very large. If transferring files between two computers on GUnet (Gonzaga's network) or ZagNet (Gonzaga student network), the transfer time will be even shorter. If transferring files over a modem, transfer times can be several hours for large files.

If you need to transfer additional files to or from the same FTP server, change the directories and file types as needed and then transfer the files. There is no limit to the number of times that the directory and file type can be changed in a single session.

If desired, a file transfer can usually be canceled by pressing **Control-C**.

Disconnecting from an FTP Server

When you have completed transferring files to or from the FTP server, you will need to disconnect. For command line users, this is done using the command **quit**. GUI users will normally have a button or menu option to close the connection.

For Additional Help

When you are connected to an FTP server, you can enter the command **help** for a list of commands. Typing **help command** (e.g., **help recv**) will usually provide some additional information on that specific command. While logged into a UNIX server such as Barney, you can enter **man ftp** at the command prompt ("[username]$" on Barney), for detailed information on the use of FTP.

FTP COMMANDS - QUICK SUMMARY

! [command]	Available in some FTP clients. Used to invoke a command that is normally only available from the command prompt. For example, **!ls** invokes the **ls** command on the local computer to list files in the current directory.
append local [remote]	Appends the contents of the local file to the end of the remote file.
ascii	Set ASCII transfer mode. Used for text, HQX, and uuencoded files.
binary	Set binary transfer mode. Used for graphics, programs, and most other files other than those listed under **ascii**.
bye	Close the connection to the FTP server and exit. Same as **quit**.
cd [remote-directory]	Set the current remote directory to the specified directory.
close	Disconnect from the FTP server but don't exit the FTP software.
delete remote-file	Deletes the specified remote file if user has required permissions.
dir [remote-directory]	List the contents of the specified remote directory. If no directory is specified, list the contents of the current remote working directory. Same as **ls**.
help [command]	Displays information concerning the specified command. If no command is specified, **help** lists the available commands.
lcd [local-directory]	Available in some FTP clients. Change the current local directory to the directory specified.
ls [remote-directory]	Same as **dir**.
open ftp-server	Open a connection to the specified FTP server. FTP must already be running and no connection currently established.
pwd	Display the name of the current working directory.
quit	Disconnect from the FTP server and exit the FTP software.
recv remote-file	Copy the specified remote file to the local working directory using the current transfer mode (binary or ASCII).
send local-file	Send the specified local file to the remote working directory using the current transfer mode (binary or ASCII).
size remote-file	Display the size of the remote file.
status	Show the current status of the FTP client.
user user-name	Log into an already open FTP server as the specified user.

Text Editors on Barney (pico, vi, emacs)

Text editors are programs used to edit text files. Text files are limited to letters and numbers only; they do not include graphics, fonts, or special formatting information found in documents created by word processors. Text files include mail messages, source code, batch files, and configuration files. Text files are the most common type of file you will use on Barney. For this reason, there are several options available to you when you are working with text files.

Text Editors Available on Barney

There are three text editors that are available on Barney. These are **pico**, **vi**, and **emacs**. Each can be run by typing their name at the "[*username*]$" prompt. For extensive help on each of these editors, type "man *editor*" at the "[*username*]$" prompt. In addition, both **pico** and **emacs** have help systems available while they are running.

Each of these text editors is significantly different from the other. **Pico** is a simple editor with basic functions such as cut and paste, searching, and spell checking. **Pico** was written by the same group that wrote the e-mail software, **pine**, so there are a great deal of similarities between the editor in **pine** and **pico**. Within **pico**, commands are listed at the bottom of the screen. Because of its ease of use and similarity to **pine**, **pico** is the default editor on Barney. Programs such as **tin** (Threaded Internet News) use **pico** whenever an editor is needed. **Pico** is suggested for those users that need some simple text editing without the complexity of **vi** or **emacs**.

Vi is a more sophisticated and complicated editor than **pico**. It has more powerful searching capabilities, can replace blocks of text, jump to line numbers, and a host of other features. Its power comes primarily from its ability to move to precise locations within a file using very few keystrokes. This makes it an excellent editor for configuration files and source code. In addition, **vi** comes preinstalled on most UNIX systems. This makes moving from one UNIX system to another easier.

Emacs is the most powerful of the three editors. It has customized environments for writing source code in various languages, allows split screens, custom commands, and more. For those users that are going to do a lot of programming or working with large text documents in UNIX, **emacs** can save a lot of time once the initial learning curve is completed. Its sophistication is matched by its complexity.

The remainder of this document will focus on the **vi** editor. Users interested in **pico** or **emacs** should refer to their respective **man** pages, their online help, or other resources.

Vi is a screen-oriented editor. That means that the entire screen is used when editing a file. In order for **vi** to work correctly, you must be using terminal emulation that supports moving around the screen. VT100 and VT220 are common emulations that support screen editing.

Vi is run by either typing “vi” or “vi *filename*” at the “[*username*]$” prompt. If no filename is specified, **vi** opens a new document. The “~” characters in an empty file are used to indicate empty lines in the file.

Command and Input Modes

Vi operates in two different modes -- command and input. The input mode is used while inserting text into the file. Some commands are available in input mode, but most are only available in command mode. Command mode is used for moving around the file, deleting or inserting blocks of text, and saving the file. In addition, command mode can be used to execute shell commands such as **ls** and **more**.

The ESC (escape) character is used to enter command mode from input mode. ESC can also be used within command mode to cancel a command that has been partially entered. Input mode is entered by (**i**)nserting or (**a**)ppending text.

When entering a command in command mode, entering a number before the command will cause the command to repeat that number of times. For example, entering “^B” scrolls the file back one screen and entering “5” then “^B” would scroll the screen back five screens. Note: the “^” indicates that the CTRL (control) is held down while pressing the letter.

Moving Around Within a File

As stated previously, one of the greatest strengths of **vi** is its ability to move around within a text file using a minimum of keystrokes. You may move by character, word, sentence, paragraph, and page. Following are some commands that can be used to move around within a file. These commands only apply while in command mode.

Scrolling

^B	Scroll backward one screen
^F	Scroll forward one screen
^U	Scroll backward a half screen
^D	Scroll forward a half screen
^Y	Scroll backward one line
^E	Scroll forward one line

Context Movement

W	Move forward to beginning of a word
B	Move backward to beginning of a word
(	Move to the beginning of a sentence*
)	Move to the end of a sentence*
{	Move to beginning of prev paragraph
}	Move to beginning of next paragraph

Line/Character Movement

h	Move backward one character
j	Move down one line in same column
k	Move up one line in the same column
spc	Move one right one character
-	Move to first real character in previous line
^	Move to first real character in current line
+	Move to first real character in the next line
$	Move to the end of the current line
0	Move to the first character of the current line
G	Goto line number (if # entered) or end of file

Movement by Search

/	Search forward for text following ‘/’
?	Search backward for text following ‘?’

*A sentence is defined as a period, !, or ? followed by two spaces or a new line.

Remember, you can cause the above commands to repeat multiple times simply by entering a number before you type the command. This is especially useful with the "G" command, as it will allow you to jump to a specific line anywhere in the file (e.g., "100G" jumps to line 100).

Entering and Editing Text

Vi offers several ways to insert and change text. You can insert text beginning at the current character, after the current character, at beginning or end of the current line, or insert a new line above or below the current line. You can also replace existing characters, blocks of characters, and lines. Commands are entered in command mode unless stated otherwise. Remember, many of these commands can be preceded with a number to indicate the number of times (or count) the command should be performed.

Inserting Text*

i	Insert before current character
a	Insert after current character
I	Insert at beginning of current line
A	Append to end of current line
O	Insert new line above current line
o	Insert new line below current
ESC	Return to command mode

Changing Text

r *char*	Replace current character with *character*
R *text* ESC	Replace current character(s) with *text*
s *text* ESC	Substitute current character with *text*
S *text* ESC	Substitute entire line with *text*
cw *text* ESC	Change current word to *text*
C *text* ESC	Change rest of current line to *text*
J	Join next line(s) to end of current line

Deleting Text

x	Delete current character(s)
X	Delete previous character(s)
dw	Delete current word(s)
db	Delete previous word(s)
dd	Delete line(s)
:*n*,*m*d	Delete lines *n* through *m*
D	Delete from cursor to end of line

Copying and Placing Text

*n*yy	Yank (cut) *n* lines and place in buffer
p	Put yanked text after cursor
P	Put yanked text before cursor

Undo

u	Undo last command
U	Restore current line to original state

*Entering a command to insert or append text will leave you in insert mode until you press the ESC key.

You can also search and replace text strings using a command in the form, ":*n*,*m*s/*str1*/*str2*/*opt*." This command will search from lines *n* to *m* for the string *str1*. If it finds *str1*, it will replace it with *str2* depending upon the *opt*ion used. *Opt*ions include 'g' for global, 'c' for confirm, and 'p' for print changes. For example, if I wanted to search lines 100 to 200 for the string "tony" and replace it with "toni" with a confirmation of the change for each instance, I would use the command ":100,200s/tony/toni/c."

Saving and Quitting vi

When quitting **vi,** there are several options for saving or throwing away changes to the document.

:wq	Write to current file and quit
:w	Write to current file without quitting
:w *file*	Write to new file without quitting
:w!	Write to file, ignoring read-only status
:q	Quit (must save first)
:q!	Quit without saving changes
:e!	Re-edit current file, discarding unsaved changes

WARNING: UNIX does not maintain multiple versions of a file like VAX systems do. Unless you specifically write to a different file, you are modifying the original file. Once the changes have been written to the file, there is no way to recover the previous contents of the file.

VI COMMAND QUICK REFERENCE

Running vi

vi	Runs vi and starts a new file
vi *file*	Runs vi and opens *file*

Scrolling

^B	Scroll backward one screen
^F	Scroll forward one screen
^U	Scroll backward a half screen
^D	Scroll forward a half screen
^Y	Scroll backward one line
^E	Scroll forward one line

Context Movement

W	Move forward to beginning of a word
B	Move backward to beginning of a word
(	Move to the beginning of a sentence
)	Move to the end of a sentence
{	Move to beginning of prev paragraph
}	Move to beginning of next paragraph

Inserting Text*

i	Insert before current character
a	Insert after current character
I	Insert at beginning of current line
A	Append to end of current line
O	Insert new line above current line
o	Insert new line below current
ESC	Return to command mode

Deleting Text

x	Delete current character(s)
X	Delete previous character(s)
dw	Delete current word(s)
db	Delete previous word(s)
dd	Delete line(s)
:*n*,*m*d	Delete lines *n* through *m*
D	Delete from cursor to end of line

Writing Files

:wq	Write to current file and quit
:w	Write to current file without quitting
:w *file*	Write to new file without quitting
:w!	Write to file, ignoring read-only status

Getting More Help

man vi	Displays the man page for vi editor
man ex	Displays the man page for ex (line oriented editor)

Line/Character Movement

h	Move backward one character
j	Move down one line in same column
k	Move up one line in the same column
spc	Move one right one character
-	Move to first real character in previous line
^	Move to first real character in current line
+	Move to first real character in the next line
$	Move to the end of the current line
0	Move to the first character of the current line
G	Goto line number (if # entered) or end of file

Movement by Search

/	Search forward for text following '/'
?	Search backward for text following '?'

Changing Text

r *char*	Replace current character with *character*
R *text* ESC	Replace current character(s) with *text*
s *text* ESC	Substitute current character with *text*
S *text* ESC	Substitute entire line with *text*
cw *text* ESC	Change current word to *text*
C *text* ESC	Change rest of current line to *text*
J	Join next line(s) to end of current line

Copying and Placing Text

*n*yy	Yank (cut) *n* lines and place in buffer
p	Put yanked text after cursor
P	Put yanked text before cursor

Undo

u	Undo last command
U	Restore current line to original state

Quitting and Resetting vi

:q	Quit (must save first)
:q!	Quit without saving changes
:e!	Re-edit current file, discarding unsaved changes

*Inserting commands will remain in insert mode until the ESC key is pressed.

Student Web Pages on Barney

Introduction

The academic server (Barney) is available for hosting student created web pages. Web pages located on Barney can be accessed by anyone using a browser on the World-Wide Web. These pages might be used for personal information, student projects, entertainment, resumes, or any other information you may wish to provide that you would like others to see.

Restrictions

Anyone that has an account on Barney may have a web page including students, clubs, and employees of Gonzaga. The creation and display of web pages are governed by Gonzaga University's Acceptable Use Policy. The disk space consumed by web pages counts against the total disk space allotment your account is allocated on Barney. The amount of disk space your account is using is displayed each time you telnet into your account.

Location of Web Files on Barney

The web server on Barney cannot access any of the files or directories in your account other than the directory "**public_html**" located in your root directory. The public_html directory can only be accessed by the web server if the access permissions are set correctly. This prevents others from accessing files in your account without your permission.

To create the public_html directory, telnet into your Barney account and type "**mkdir public_html**" at the $ prompt. To make the directory readable by everyone, type "**chmod 755 public_html**". Any files located in this directory will now be accessible as long as their permissions are set correctly.

The file "**index.html**" is the *default* web page within the public_html directory (or any sub-directory within public_html). This is the web document that will be opened if no specific file is specified in the URL. For example, http://barney.gonzaga.edu/~jdoe will display the index.html file in jdoe's public_html directory while http://barney.gonzaga.edu/~jdoe/resume.html will display the resume.html file in jdoe's public_html directory. It's always a good idea to have an index.html in your public_html directory so people have a starting web page for your account.

File and Directory Permissions

By default, Barney makes any file you create readable and writeable only by you. This is to protect your files from being accessed by others unless you specifically give them permission to read the files. In order for a web page to be readable by the web server, the file and the directory it is in must have public read permissions. When using FTP to transfer files to Barney, Barney

will automatically create the file with global read privileges so that you don't have to change these privileges manually.

To make a file readable by everyone, type "**chmod 644 *filename***" at the $ prompt, replacing *filename* with the actual name of the file to set. To make a directory readable by everyone, type "**chmod 755 *directoryname***" at the $ prompt. Type "man chmod" for more information regarding the chmod command.

Transferring Files to Barney

HTML documents may be created directly on Barney or may be created on a different computer and then uploaded to Barney. Files can be uploaded to Barney using FTP if there is a direct connection (e.g., your computer is on ZagNet) or modem PPP connection (i.e., connecting via Verio Northwest or other ISP) between your computer and Barney. If you are connecting over a modem and are not using PPP, the file may be uploaded using a modem transfer protocol. For more information on transferring files to Barney, see the section titled *Downloading Files from Barney using FTP* or the handout *Downloading Files from Barney using a Modem*.

Accessing Student Web Pages from the World-Wide Web

Once you have placed your web pages on Barney and have set the access permissions correctly, others may access your pages. The URL (Universal Resource Locator) for your **default** web page is **http://barney.gonzaga.edu/~youruserid**. For example, if your userid was "jdoe," the URL for your default page would be http://barney.gonzaga.edu/~jdoe. Your default page is named "**index.html**" and is located in your "**public_html**" directory on Barney. Other pages can be accessed directly by entering the name of the web page after your user id. For example, http://barney.gonzaga.edu/~jdoe/resume.html would display the file "resume.html" in your public_html directory.

Creating HTML Documents

Web pages are commonly referred to as HTML documents because they use the HyperText Markup Language (HTML) to provide formatting information. There are many programs that can create HTML documents including Netscape Navigator 3.0 Gold, Netscape Communicator 4.0, Claris Home Page, Microsoft Office 97 (and earlier versions with free plug-ins from Microsoft), and dozens of other programs. Since HTML documents are simply text documents with special "tags" to provide formatting information, they can also be created using text editors and word processors. These include text editors on Barney such as pico, vi, and emacs. How you create the documents is arbitrary and depends on your preferences. The web server on Barney doesn't care which program created the web page as long as it is in the correct format.

There are dozens of books on creating web pages and many excellent tutorials and resources on the Internet. A number of classes at Gonzaga also teach web page development.

These options and more are available through LIBRIS: http://libris.gonzaga.edu

GONZAGA LIBRARY CATALOG

Searches for books, media, state and federal documents and titles of magazines and journals held in the Foley Library.

ARTICLE INDEXES / DATABASES

- **ATLA -** Comprehensive index to periodicals, book reviews, scholarly essays, conference proceedings, and books on religion and related fields.
- **CINAHL -** Comprehensive & authoritative index to current published literature in English for nurses and other allied health professionals.
- **Compendex Engineering Index -** Major index to engineering periodicals, conference proceedings and related materials.
- **Ebscohost -** Abstracts and indexing for over 3,200 scholarly journals covering the social sciences, humanities, education and more. Also offers full text for over 1,000 journals with many dating back to 1990. Includes coverage of over 1,700 peer-reviewed journals.
- **ERIC (1966 to Present)** - Index to journal articles and unpublished documents in the field of education.
- **Find Law -** A searchable directory of Internet legal resources.
- **Legal Resources Index** - Indexes approximately 806 legal publications. Sources include all major law reviews, seven U.S legal newspapers, law specialty publications and bar association journals.
- **ProQuest Direct** - Provides access to summaries of articles from over 5,000 publications including newspapers. Many articles also appear in full-text, full-image format. Available on the GU campus network.
- **PubMed** - Access to Medline, the most comprehensive index to the world's medical literature, and additional biomedical information resources.
- **Sociofile** - Collection of citations and abstracts reflecting the world's periodical literature in sociology and related disciplines.

- **SIRS Researcher** - General reference database with thousands of full-text articles covering social, scientific, historic, economic, political and global issues. Articles are selected from more than 1,200 newspapers, magazines and government publications.
- **UnCover** (1988 to Present) - UnCover is a database containing tables of contents of 10,000 plus recent journal. Document delivery of articles located in UnCover is available for a fee.

OTHER LIBRARIES

- **Washington State and Spokane Area Libraries -** Gonzaga University Law, Whitworth College, Spokane Public, North Idaho College, University of Washington, University of Idaho and other libraries.
- **Library of Congress**
- **California Digital Library**
- **CARL partner libraries**

YOUR LIBRARY RECORD

Enter your library card number (found on the right hand side of your GU ID card) and view your library record: items checked out, overdue, on hold and fines.

REFERENCE SOURCES AND GOVERNMENT PUBLICATIONS

- **Dictionaries:** Rhyming Dictionary, Roget's Internet Thesaurus, WWWebster's Dictionary and others.
- **Directories & Phone Books:** AT&T 800 Directory, Canada411, Publishers, Associations on the Net and others.
- **Encyclopedias:** Encyclopedia Britannica Online, Encyclopedia Smithsonian, The Catholic Encyclopedia and others.
- **Geography:** CIA World Factbook, The Embassy Page, World Flags, Country Studies and others
- **News:** CNN, Facts of File, MSNBC, Spokesman Review, UNCG's News & Newspapers Online and others.
- **Quotations:** Bartlett's Book of Familiar Quotations and The Commonplace Book
- **Style Manuals:** Citing Electronic Resources, Elements of Style and Pitsco's Launch to Citing WWW Addresses
- **Miscellaneous:** Company Profiles (directory information for 125,000 private & public companies), Nobel Prizes and Statistical Abstract of the United States.

GU Catalog Searching Tips

SEARCH	BASIC COMMANDS
KEYWORD	Use when you are: • Looking for a particular **subject** Example: gonzaga university • Unsure of the exact wording of a title (keyword search) Example: gone wind
AUTHOR OR NAME	Use when you are: • Looking for something **BY** OR **ABOUT** a person Example: crosby bing or bing crosby • Looking for something **BY** or **ABOUT** an organization Example: central intelligence agency
TITLE BROWSE	Use when you are: • Searching the **EXACT** title of a book, journal or magazine Example: adventures of huckleberry fin journal of higher education
SUBJECT BROWSE	Use when you are: • Searching the **EXACT** subject heading of a book, journal or magazine Example: art, modern
BROWSE CALL #	Use when you are: • Interested in browsing a **CALL NUMBER SECTION** Example: hv1400

Assistance is available from the Foley Library Reference Desk 323-5931

Gonzaga University Computer Labs - Fall 1999

Bldg	Room	Normal Hours (4)	Type	Software	Net (1)	Print(3)	Restrictions	Contact
Admin	243	24 Hours	Win95/NT Mac	MS Office 97 Pro(2), WordPerfect 8.0, Netscape MS Office 4.2(2), WordPerfect 3.5, Netscape	Yes	DotMat Laser	Lab closed occasionally for classes	Vicki Craigen (x5552)
Admin	134	TBA	WinNT Mac	MS Office 97 Pro(2), WordPerfect 8, Netscape WordPerfect 3.0	Yes	Laser	Lab hours dependent upon tutor availability	Donna Campbell (x6676)
Admin	425	TBA	Mac	MS Office 98(2), ClarisWorks, Desktop Publishing	Yes	DotMat Laser	Communication Arts students only Comm Arts students have 24 hr access	John Caputo (x6656)
Foley	ISM	M-Th 8a-8p F 8a-5p, Sat 10a-4p Sun 1p-5p	Win95 Mac	MS Office 95 Pro (2), Netscape MS Office(2), WordPerfect, Netscape	Yes	DotMat Laser	Open during library hours	Matt Wood (x3861)
Herak	220	TBA	Various	Dynamic configuration to meet class needs	Yes	Laser	Access limited to certain classes	Brett Hendricks (x3910)
Herak	223	TBA	WinNT	MS Office 97(2), Netscape, Visual Studio 6.0	Yes	DotMat InkJet	Lab hours dependent upon workstudy avail Must have a lab account	Brett Hendricks (x3910)
Herak	103/104	M-F 7:30a-10p	WinNT	MS Office 2000, AutoCAD, Adobe Photoshop, Netscape, MS Explorer, Engineering Software	Yes	Laser Color	Engineering students only Engineering students have 24 hr access	Jim Witten (x5709)
Hughes	137	M-F 8a-5p	Mac	Biology software	Yes	Laser	Biology classes and students only	Sherry Woods (x6626)
Jepson	07	M-F 9a-5p	Win95 Win3.1	MS Office Pro(2), Netscape MS Office(2), MS Project, Netscape, Paradox 5, WordPerfect 5.1 (DOS), WordPerfect 5.2 (Win3.1)	Yes	DotMat Laser Color	Lab closed occasionally for lectures	Bob Toshack (x3407)
Music		Office hours	Mac	ClarisWorks 5.0, Music Composition	Yes	Laser	Music students only	Music Office (x6733)
Rosauer	101	M-Th 9a-10p F 9a-5p, Sat 12p-5p Sun 2p-10p	Mac Win95	MS Office 97/98(2), ClarisWorks, MS Works Netscape, PageMaker, Photoshop, educ. software	Yes	Laser Color	Educational students have priority	Jason Gilman (x3660)

(1) "Net" access includes access to the Foley Library, Barney, and the Internet. It may or may not include graphical (e.g., Netscape) access.
(2) MS Office includes Word, Excel, PowerPoint. MS Office Pro also includes Access database software.
(3) Some computer labs charge for printing to laser or color printers. Contact that lab for details.
(4) Hours of computer labs subject to change.

UNIX Quick Reference

The following are commonly used commands on UNIX systems. This include Barney, Chaos, and the Sun workstations in the Computer Science Lab. The commands on Chaos and the Sun workstations may differ slightly from these commands.

The following format is used for commands:

Italic indicates a variable that you supply
Bold indicates typed exactly as shown

---

alias
Creates a temporary name for a UNIX command.
alias *name='command'*
To remove an alias:
unalias *name*

apropos
Display a list of man pages containing *keyword.*
apropos *keyword*

archie
Searches Internet ftp sites for the specified file name.
archie *file*

cal
Display a calendar for the current month.
cal
To display a calendar for the specified year:
cal *year*

cat
Displays the contents of a text file.
cat *file*

cd
Changes current directory to a different directory.
cd *directory*
To change to you home directory
cd
Directory abbreviations
~ Home directory
. Current (working) directory
.. Parent Directory

chmod
Changes permission status for a file or directory.
chmod *code file*
To keep a file private (default for new files)
chmod 600 *file*
To give everyone read permission
chmod 644 *file*

compress
Reduces the size of a file and adds a .Z to the file name.
compress *file*
To restore a compressed file:
uncompress *file.Z*

cp
Makes a copy of a file.
cp *file newfile*
To copy a file into a different directory:
cp *file directory*
To inquire before overwriting an existing file:
cp -i *file newfile*

diff
Compares two files and compares the differences.
diff *file1 file2*

exit
Ends your computer session.

finger
Displays user information at the specified host (computer).
finger *userid@host*
For information on people located on Barney
finger *userid*

forward
To forward your mail to another account.
forward *userid@host*
To stop the forwarding of mail:
forward none

ftp
Starts the file transfer program with a remote computer.
ftp *address*

grep
Finds lines in a file matching the specified character pattern.
grep -cin *pattern file*
-c Lists a count of the lines that matched the pattern
-i Ignores case
-n Lists line number for each line

head
Displays the first ten lines of a file.
head *file*
To display the first *n* number of lines of a file:
head -*n file*

jobs
Displays active jobs and their corresponding job numbers.
jobs
To start a job in the background:
job **&**
To return a job to the foreground:
fg %*jobnumber*
To send a running job to the background:
<Control>z bg

kill
Terminates a process by its process identification number (pid).
kill *pid*
Strongest form of kill:
kill -9 *pid*

lp
Print a file to the default printer.
lp *file*
To print a job to a specific printer.
lp -d *printername file*

ls
Lists the files and subdirectories in the current directory.
ls -ltad *filter*
-l Lists long format (same as **ll**)
-t Lists sorted by modification time
-a Lists all files including files beginning with a dot (.)
-d Suppresses the listing of the contents of a subdirectory

lynx
Runs the text-based web browser.
lynx *url*

mailid
Shows accounts with *keyword* in the user's e-mail address.
mailid *keyword*

man
Display the **man**ual page for the specified command.
man *command*

mesg
Deny or allow access for other users to **write** to your account.
mesg -y Allow users to **write** to your account.
mesg -n Deny users ability to **write** to your account.

mkdir
Creates a new directory within the current directory.
mkdir *directory*

more
Displays the contents of a file one screen at a time.
more *file*
Use <**spacebar**> to scroll forward and **q** to quit.

mv
Moves a file or directory to a different directory.
mv *file directory*
Renames a file or directory:
mv *oldfilename newfilename*
To inquire before overwriting an existing file:
mv -i *oldfilename newfilename*

news
Display unread announcements.

passwd
Changes account password.

pico
Starts the Pico text editor.

pine
Starts the Pine electronic mail program.

ps
Displays process information for processes created by you.

pwd
Display the absolute pathname of the current directory.

rm
Permanently deletes a file.
rm *file*
To confirm prior to deleting file:
rm -i *file*
To recursively delete a directory:
rm -r *directory*

rmdir
Deletes an empty directory.
rmdir *directory*
To confirm prior to deleting directory:
rmdir -i *directory*

spell
Checks the spelling of the contents of a file.
spell *file*

tail
Displays the last ten lines of a file.
tail *file*
To display the last *n* number of lines of a file:
tail -*n file*

telnet
Starts a telnet session with a remote computer.
telnet *address*

tin
Starts threaded Usenet news reader.

vi
Starts the vi text editor with a file.
vi *file*

w
Displays a list of who is logged onto Barney.

wc
Counts lines, words, and characters in a file.
wc *file*

xmodem
Transfer a file via modem (non-PPP)
xmodem -rstb *file*
-r Receive a file (fm local computer to server)
-s Send a file (fm server to local computer)
-t Transfer a text file
-b Transfer a binary file

ytalk
Talk with another user that is logged onto a computer.
ytalk *username@host*

Purchasing a Computer

If you are planning on purchasing a computer, you may want to take a couple of things into consideration before making the purchase. This handout doesn't attempt to offer any definite answers but it may be useful when making a purchasing decision. Keep in mind that the information contained in this document was written in August of 1999. The computer market changes so rapidly that the information that was valid when this document was written may not apply today.

Considerations

There are a number of things to keep in mind when purchasing a computer. These include what field you are entering, whether or not you will be working on a network, what type of work you will be doing on the computer, and how often you can afford to replace the computer. You should also take into consideration the entertainment side of computers since many personal computers that are purchased for business purposes are also used to play games.

Who to Ask

You might think that the logical answer would be one of the computer gurus down the hall, a computer support person at Gonzaga, or a salesperson at a computer store. While they may give you an abundance of technical details about computers, they may not necessarily know your needs. The best source of information can be from those people that are working in the same field; they often have experience in areas you'll be working and they may have gone through the same ordeal themselves. Professors can also be a good source of information; they should know the current needs of their field and should be able to give you some good pointers. You might also try local user groups; the people that often attend user group meetings are new computer owners from all walks of life. Other sources of information include computer magazines, trade journals, and the Internet.

The most important thing to consider when asking others for their recommendations is to back up their information with information from other sources. This is especially true when looking at a particular computer vendor. You should check on the company's technical support ratings, satisfaction ratings, whether or not they have toll free technical support, etc. Purchasing a computer is a major expense and should be evaluated seriously before making purchase.

Purchasing through Gonzaga University

Students are able to purchase some brands of computers through the campus at reduced pricing. Apple Macintosh and several brands of PCs are available at educational discounts through Purchasing. For more information on purchasing through Gonzaga, call Purchasing at 323-5672.

Software

There are thousands of software packages available for both the PC and Macintosh platforms. The software that will be most commonly used will be word processors, Internet software, presentation programs, and spreadsheets. Much of Gonzaga has standardized on Microsoft Office for word processing (Word), spreadsheets (Excel), and presentations (PowerPoint). If you choose to use a different package, try to select one that is able to read documents created by Microsoft Office products. Microsoft Office is available in the campus bookstore.

Typical Configuration for Students

The following are typical configurations available in August 1999. They are meant to be used as a baseline for making a purchasing decision. These systems will not meet the needs of everyone.

PC w/Windows 95/98

	Minimum	Recommended
Processor:	Pentium 166	Pentium II 333
Memory:	32 MB RAM	64 MB RAM
Hard Disk:	3.2 GB	6.4 GB
CD-ROM:	20x	24x
Monitor:	14” SVGA	17” SVGA
Modem*:	28.8 kbps	56 kbps v.90
Sound:	16-bit SoundBlaster	16-bit SoundBlaster
Network**:	SMC ISA 10BaseT Ethernet	SMC PCI 10BaseT Ethernet

Macintosh

	Minimum	Recommended
Processor:	PowerPC 603/200	PowerPC G3/266
Memory:	16 MB RAM	64 MB RAM
Hard Disk:	2.0 GB	6.0 GB
CD-ROM:	12x	24x
Monitor:	15” Color	17” Color
Modem*:	28.8 kbps	56 kbps v.90
Sound:	Built-in	Built-in
Network**:	Apple or Asanté 10BaseT	Apple or Asanté 10BaseT

*Most consumer computer models come with either a modem or no communication device. In order to use ZagNet, you will need to purchase a 10BaseT Ethernet card separately (see note below). Some manufacturers either include an Ethernet card or include it as an option. Apple includes Ethernet with all new Macintosh computers.
**To access ZagNet, you must have an Ethernet card. Gonzaga will support only SMC (PC) and Apple or Asanté (Mac) 10BaseT Ethernet cards. If you are not planning to connect to ZagNet or other network, then an Ethernet card is not necessary.

Internet Worksheet

Introduction

Every computer connected to ZagNet requires certain address information that will uniquely identify it to the network and will allow it to communicate with other computers on the Gonzaga campus and the Internet. The following worksheet will determine the values for your computer.

Basic Configuration Information

The following information is required in order for your Internet connection to work properly:

IP Address: **147.222._____._____** (e.g., 147.222.131.125)

The IP address is the unique identifier for your computer. It is a series of four numbers separated by periods. The periods are required whenever using an IP address. All IP addresses on campus begin with "147.222.". For residence halls, the third number specifies the residence hall (see back of this form) and the fourth number is the specific port number in the residence hall. The port number is written on the wall jack where you connect the network cable.

Router/Gateway Address: **147.222._____.254** (e.g., 147.222.131.254)

The router/gateway address is unique for each residence hall. Only the third number of the four is different depending upon the residence hall. The router/gateway addresses for each of the residence halls is on the back of this form.

The following information is the same for each of the residence halls:

Subnet Mask: **255.255.255.0**

This is also known as a "Class C" address.

DNS/Name Server Address: **147.222.1.253**
Search Domain: **gonzaga.edu**

Additional Information

The following information is used by various Internet applications such as e-mail clients, Usenet news clients, etc.

SMTP/POP Server: **barney.gonzaga.edu**
NNTP/News Server: **news.gonzaga.edu**
LDAP Directory Server: **whitepages.gonzaga.edu**
Web Server*: **http://barney.gonzaga.edu**

*This is the web server where student web pages are located. The official Gonzaga web server is http://www.gonzaga.edu.

ZagNet Information for Residence Halls

Location	Address Group	Gateway Address	Subnet Address
301 Boone	147.222.131.xxx	147.222.131.254	255.255.255.0
801 Boone	147.222.132.xxx	147.222.132.254	255.255.255.0
Alliance	147.222.133.xxx	147.222.133.254	255.255.255.0
Burch	147.222.134.xxx	147.222.134.254	255.255.255.0
Campion	147.222.135.xxx	147.222.135.254	255.255.255.0
Crimont	147.222.136.xxx	147.222.136.254	255.255.255.0
Cushing	147.222.137.xxx	147.222.137.254	255.255.255.0
Desmet	147.222.138.xxx	147.222.138.254	255.255.255.0
Dooley	147.222.139.xxx	147.222.139.254	255.255.255.0
Dussault	147.222.140.xxx	147.222.140.254	255.255.255.0
Lincoln	147.222.141.xxx	147.222.141.254	255.255.255.0
Madonna	147.222.142.xxx	147.222.142.254	255.255.255.0
Rebmann	147.222.143.xxx	147.222.143.254	255.255.255.0
Roncalli	147.222.144.xxx	147.222.144.254	255.255.255.0
St. Catherine	147.222.145.xxx	147.222.145.254	255.255.255.0
St. Monica	147.222.146.xxx	147.222.146.254	255.255.255.0
Sharp Apt/House	147.222.147.xxx	147.222.147.254	255.255.255.0
Welsh	147.222.148.xxx	147.222.148.254	255.255.255.0

Network and Computer Resource Acceptable Use Policy

Section 1: Introduction

{a} This policy is established to make users of Gonzaga University's computing resources aware of their privileges and responsibilities.

{b} This policy is established to maximize the value of those resources to the university community while permitting maximum freedom of use consistent with law, the University's mission statement, the Student Handbook, the Personnel Policies and Procedures Manual, the Faculty Handbook, and a productive environment. Any use of Gonzaga University computing resources which violates policies contained in these manuals and handbooks also violates this policy; nothing in this policy shall contradict existing University policy.

{c} Violation of this policy can result in reprimand, reduction or loss of computing privileges, and/or referral to University authorities for disciplinary action. Violation of law may result in referral to appropriate authorities.

{d} This policy provides general guidelines regarding the use of GUnet. Refer to http://www.gonzaga.edu/tech/aup/ for specific examples of acceptable and unacceptable uses of GUnet as defined by this policy.

Section 2: Definitions

{a} *GUnet* -- the physical network media and the attached computers and software owned or controlled by the University. GUnet includes ZagNet, the student network connecting the residence halls to the campus network.

{b} *Internet* -- the global computer network composed of millions of computers and thousands of networks.

{c} *Logged on* -- connected to a service with a non-public user identification (e.g., personal account).

{d} *Resource* -- any computing device, peripheral, software, or related consumable (e.g., paper, disk space, central processor time, network bandwidth) owned or controlled by the University.

{e} *Service* -- any software that makes a computer's files or other locally stored information available for use by another computer or facilitates the transfer of data between two remote computers. Services include, but are not limited to, web, file, and e-mail server software.

{f} *Spam* -- unsolicited mass e-mail for the purpose of advertising a service, personal gain, or other inappropriate use.

Section 3: General Usage Statement

{a} Network and computing resources at the University are provided primarily to support the mission of the University. Users may occasionally use GUnet for personal needs as long as such use is consonant with established University policy and does not inhibit academic or administrative use of GUnet.

{b} The University cannot provide, and will not be responsible for, software kept on personally owned computers, nor are they responsible for the installation, repair, maintenance or upgrade of personally owned hardware.

{c} Users should not leave a computer logged on if the user will be away from the computer for an extended period of time (e.g., two hours) or the computer is in an unsecured area. Data on local hard drives should be secured either through password protection or physical security (e.g., locked office) when the user is not present.

{d} Personal accounts are private and should not be shared with others.

{e} The use of University resources, including GUnet, for political gain or exclusive personal gain shall not be permitted.

{f} The University may restrict the use of computing and network resources. This includes blocking spam messages and deleting user files and mail to conserve disk space on University owned computers.

{g} Employees, students, and other authorized users may post electronic documents and images (e.g. web pages) for public access provided that those documents conform to policies contained within the documents listed in Section 1{b} and United States and international copyright law.

Section 4: Unacceptable Uses

{a} Using GUnet for any unlawful activity.

{b} Sending spam or creating or retransmitting chain e-mail messages.

{c} Sending e-mail from another user's account.

{d} Altering the header of an e-mail message to prevent the recipient from determining the actual sender of the e-mail.

{e} Logging into or using any computer account or accessing, modifying, or creating any files without the account owner's permission.

{f} Introducing new services or resources (e.g., personal web server) or altering existing services or resources (e.g., registering personal domain name) on GUnet without the approval of Information Technology Services.

{g} Transmitting, without authorization, information proprietary to the University or information that could be construed as a statement of official University policy, position, or attitude.

{h} Distributing information encouraging the patronage of network sites containing material prohibited by policies contained within the documents listed in Section 1{b}.

{i} Wasting resources such as print services, disk space, and network bandwidth.

{j} Intercepting network traffic without authorization.

{k} Using GUnet for any activity that results in degradation of University provided services, denies services to other GUnet users, or jeopardizes the security or capabilities of GUnet.

Section 5: Privacy

{a} Under ordinary and normal circumstances, a user's computer files -- including electronic mail -- are considered private. In order to correct system problems or investigate misuse of resources, it may be necessary for system administrators to examine users' files (including e-mail and network traffic). In such cases, user privacy will be respected to the extent possible consistent with University policy and the law.

{b} Personal web pages and e-mail addresses may be listed on University directories unless the user specifically requests that this information be kept confidential.

Section 6: Agreement

{a} I understand that access to GUnet is a *privilege* and not a right. I acknowledge that failure to conform to this policy statement may result in revocation of my GUnet account(s) and/or network access. Furthermore, disciplinary action consistent with University policy may be taken by the appropriate University officers (e.g., Student Life, Department Chair, supervisor) and illegal activities may be referred to the appropriate authorities.

{b} I understand the above stated conditions for accessing GUnet and the Internet, and I agree to abide by these terms and conditions. ***I understand that certain material found on the Internet is offensive to some people and that I access the Internet of my own free will.*** Furthermore, I request access to Gonzaga University computing resources and/or an account on GUnet.

_____

Name of user (printed)

_____

Signature of user Date